## **CHAPTER 9**

# APPLICABILITY OF JAPAN'S ODA TO PPP PROJECTS

## CHAPTER 9 APPLICABILITY OF JAPAN'S ODA TO PPP PROJECTS

## 9.1 JAPAN'S ODA FACILITIES

## 9.1.1 General Conditions

| • | Borrower         | : | Must be a Government Agency(ies) or<br>Government-owned Controlled Corporation/Bank<br>(GOCC or GOCB). |  |
|---|------------------|---|--|--|
|   |                  |   | and  |  |
|   |                  |   | Japan's ODA cannot be directly utilized by a private sector.   |  |
| • | Guarantor        | : | The Government of the Republic of the Philippines (GRP)  |  |
| • | Executing Agency | : | Government Agency or GOCC/GOCB   |  |
| • | Currency         | : | Japanese Yen (Exchange rate risk by GRP)   |  |

### 9.1.2 Types of Facilities

There are four (4) types of facilities excluding grant aid and technical assistance as follows;

- Project Loan
- Two-Step Loan (TSL)
- Program Loan
- Sector Loan

#### 1) Project Loan

Conditions are as follows;

- a) High priority project in the sector.
- b) Approved by ICC
- c) ECC Secured
- d) Agency/GOCC has financial capability to prepare counterpart fund for the Project.
- e) Application of the loan
  - Taxes shall be excluded.
  - ROW acquisition cost shall be excluded.
  - Max. 80% of the Project Cost.
  - Contractor shall be selected through International Competitive Bidding (ICB).

f) Terms and Conditions

| Category      | Type of<br>Terms | Standard/<br>Option | Interest<br>Rate (%) | Repayment<br>Period<br>(Year) | Grace<br>Period<br>(Year) | Conditions<br>for<br>Procurement |
|---------------|------------------|---------------------|----------------------|-------------------------------|---------------------------|----------------------------------|
| Middle-Income | General          | Standard            | 1.4                  | 25                            | 7                         | Untied                           |
| Countries     | Terms            | Option 1            | 0.95                 | 20                            | 6                         |                                  |
|               |                  | Option 2            | 0.8                  | 15                            | 5                         |                                  |
|               | Preferential     | Standard            | 0.65                 | 40                            | 10                        | Untied                           |
|               | Terms            | Option 1            | 0.55                 | 30                            | 10                        |                                  |
|               |                  | Option 2            | 0.5                  | 20                            | 6                         |                                  |
|               |                  | Option 3            | 0.4                  | 15                            | 5                         |                                  |
|               | STEP             | Standard            | 0.2                  | 40                            | 10                        | Tied                             |
|               |                  | Option              | 0.1                  | 30                            | 10                        |                                  |

Source: JICA

- g) Loan Disbursement Period
  - 5~10 years

### 2) Two (2) – Step Loan (in case of "Logistics Infrastructure Development Project")

| a) | Borrower  | : | Development Bank of the Philippines (DBP) |                             |
|----|-----------|---|---|-----------------------------|
| b) | Guarantor | : | The Government of the (GRP)               | Republic of the Philippines |

- c) Executing Agency : DBP
- d) Target End User
  - Private companies (more than 70% of the capital is financed by the Philippines)
  - LGUs
  - GOCC
  - Cooperative associations
- e) Lending Methods
  - Direct loans (financing by DBP to end users)
  - Indirect loans (financing by DBP through Private Financial Institutions (PFIs) or Micro Finance Institutions (MFIs)
- f) Project Implementation Schedule
  - When the financing by JICA to DBP is completed.
  - November 2009 to November 2016 (85 months or 7.08 years)
- g) Re-financing Special Account
  - Surplus funds arising out of a gap between the repayment period of sub-loan and repayment period of the Yen loan will be utilized and a revolving fund will be established to make a new loan under the same condition.

#### 3) Program Loan (in case of Development Policy Support Program (II) )

- a) Borrower : Government of the Republic of the Philippines
- b) Executing Agency : Department of Finance
- c) Applicable Items
  - Maintaining macro economic and fiscal stability.

- Enhancing governance and anti-corruption strategies in public expenditure management.
- Strengthening the investment climate and infrastructure development.
  - Formulate an action plan for reviewing investment procedures.
    - Prepare standard documents for PPP projects.
- Increasing social inclusion.

#### 4) Sector Loan

- Similar to Project Loan
- Multi-projects in a sector (or a sub-sector) will be package and implemented in accordance with priority.
- Applicable usually to a group of small to medium scale sub-projects.

### 9.2 APPLICABILITY OF JAPAN'S ODA TO EACH TYPE OF PPP MODALITY

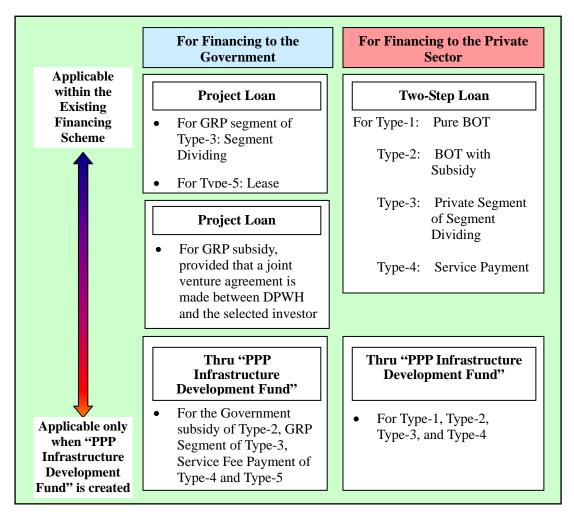
Applicability of Japan's ODA to each type of PPP modality is shown in **Table 9.2-1** and graphically shown in **Figure 9.2-1**.

| PPP Modality                               | Financing to GRP  | Financing to Private             |
|--|---|----------------------------------|
|  | 0   | Sector                           |
| <b>Type-1:</b><br>Pure BOT Type            | • GRP is only responsible for ROW acquisition, for which ODA is not applicable.   | • Two-Step Loan through GOCB.    |
| <b>Type-2:</b><br>BOT Type with<br>Subsidy | <ul> <li>Can ODA be used for the GRP subsidy?</li> <li><u>Option-1</u>: The private investor is selected through international competitive bidding (ICB). DPWH and selected investor enter into Joint Venture Agreement in accordance with EO 423, series 2005. ODA is provided to DPWH and used for GRP subsidy.</li> <li><u>Option-2</u>: DPWH or other appropriate agency such as DOF will establish "PPP Infra Development Fund" composed of local fund, ODA loan, and fund from international lending institutions. The Government provides subsidy from the Fund to the private investor selected through ICB.</li> </ul> | • Two-Step Loan<br>through GOCB. |
| <b>Type-3:</b><br>Segment Dividing<br>Type | • Project loan from Japan's ODA can be used for the design and construction of GRP segment.   | • Two-Step Loan through GOCB.    |
| <b>Type-4:</b><br>Service Payment<br>Type  | <ul> <li>Can ODA be used for this type?</li> <li>Disbursement period of GRP is long for about 30 years (or O &amp; M period). Amount must be approved by GAA annually.</li> <li>Whereas, disbursement period of ODA is usually 5-10 years.</li> <li>Possible way of ODA application might be similar to "PPP Infra Development Fund".</li> </ul>  | • Two-Step Loan through GOCB.    |
| <b>Type-5:</b><br>Lease Type               | • Project loan from Japan's ODA can be used for the design and construction of the project.   |                                  |

TABLE 9.2-1 APPLICABILITY OF JAPAN'S ODA TO EACH TYPEOF PPP MODALITY

**Note:** For projects under unsolicited proposal, ODA cannot be used, since GRP prohibits GRP's subsidy, guarantee or equity.

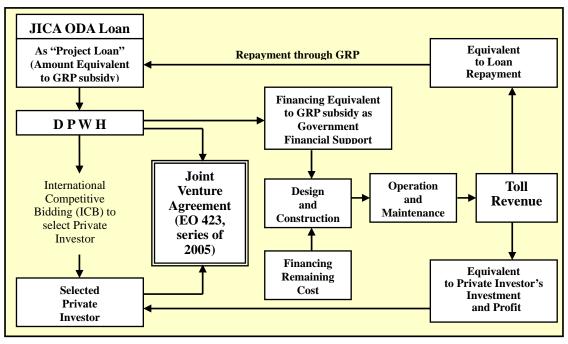
Source: JICA Study Team



Source: JICA Study Team

#### FIGURE 9.2-1 APPLICABILITY OF JAPAN'S ODA TO PPP PROJECTS

Proposed mechanism to apply JICA ODA to GRP's subsidy is proposed by the Study Team as shown in **Figure 9.2-2.** DPWH and selected Private Investor through international competitive bidding will enter into a joint venture agreement in accordance with EO 423, series of 2005 to form SPC. Equivalent amount of GRP's subsidy is loaned from JICA to DPWH and provided to SPC as GRP's financial support. Repayment of JICA loan will be made from toll revenue.



Source: JICA Study Team FIGURE 9.2-2 PROPOSED MECHANISM TO APPLY JICA SUBSIDY

#### 9.3 STUDY ON CREATION OF PPP FUND

#### 9.3.1 Needs of PPP Projects

As far as information collected by the Study Team is concerned, there are huge needs of PPP projects even for the transport sector alone as shown in **Table 9.3.1-1**.

| TABLE 9.3.1-1         TRANSPORT | SECTOR | INFRASTRUCTURE | DEVELOPMENT |  |  |
|---------------------------------|--------|----------------|-------------|--|--|
| NEEDS                           |        |                |             |  |  |

| Sub-sector             | No. of Projects | Estimated Cost (Billion Php) |
|------------------------|-----------------|------------------------------|
| Tollway Development    | 13              | 258.9                        |
| Urban Rail Development | 7               | 249.5                        |
| Port development       | 3               | 5.5                          |
| Airport Development    | 3               | 6.4                          |
| Total                  | 25              | 520.3                        |

Source: Compiled by the Study Team based on the information from DPWH and DOTC

These projects need to be implemented to provide necessary transport services to the people as early as possible and for economic and social development of the country. Huge required fund should be properly shared between the public sector and the private sector for the early completion of these projects.

Once PPP funds are created, the public sector can avail of ready and sustainable fund without annually arranging national budget. On the other hand, the private sector can avail of lower interest rate loan with longer repayment period, so that the private sector can challenge less profitable projects. In view of above, it is worthwhile to study creation of PPP fund, for promotion of PPP projects.

In this Study, existing PPP funds in the Philippines and other countries and those being studied by JICA as well as proposed schemes by the Study Team are presented. The Government should also study with reference to above fund schemes.

## 9.3.2 Type of PPP Fund

Type of PPP fund can be classified into the following (see **Table 9.3.2-1**);

- Fund for project development, i.e. business case study, feasibility study, and tender assistance
- Fund for the Government and for the Private Sector during implementation.

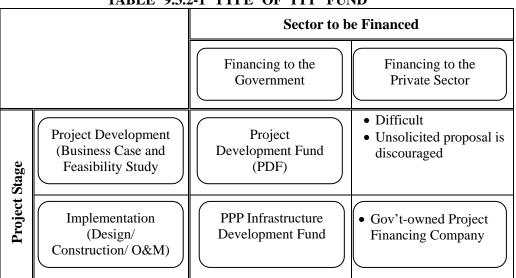


 TABLE 9.3.2-1
 TYPE
 OF
 PPP
 FUND

#### 9.3.3 Existing and Proposed PPP Fund

Existing PPP fund and similar facilities in the Philippines, proposed funds and PPP funds in other countries are shown in **Table 9.3.3-1**.

#### 9.3.4 **Project Development Facility (PDF)**

#### 1) PDF at BOT Center (now PPP Center) in the Philippines

Outline of PDF at BOT Center in the Philippines is shown in Figure 9.3.4-1.

#### a) Some Issues of Existing PDF

- Amount of seed fund was not so big, still BOT Center could not utilize all of the fund. This is maybe due to Agencies' Plan for PPP projects are pre-matured (lack of identified projects) and due to lack of BOT Center's efforts to advocate usage of fund.
- Consultancy cost per project was very small ranging from US\$ 51,000 ~ 150,000. It is difficult to prepare a complete feasibility study at these costs.
- Failed to recover revolving fund. Agencies were not sure if the project is implemented under PPP modality.
- Lacked proper study on PPP modalities, thus failed in bidding, and revolving fund was not refunded from the Agency.

#### b) Government's Plan

- The Government is planning to transfer BOT Center from DTI to NEDA.
- The Government is planning to put up more fund to PDF from GAA and other sources including ODA.
- If BOT Center is transferred to NEDA, project approval by NEDA ICC or NEDA Board will be much easier and faster, since NEDA holds all/detailed information.

#### c) Some Suggestions

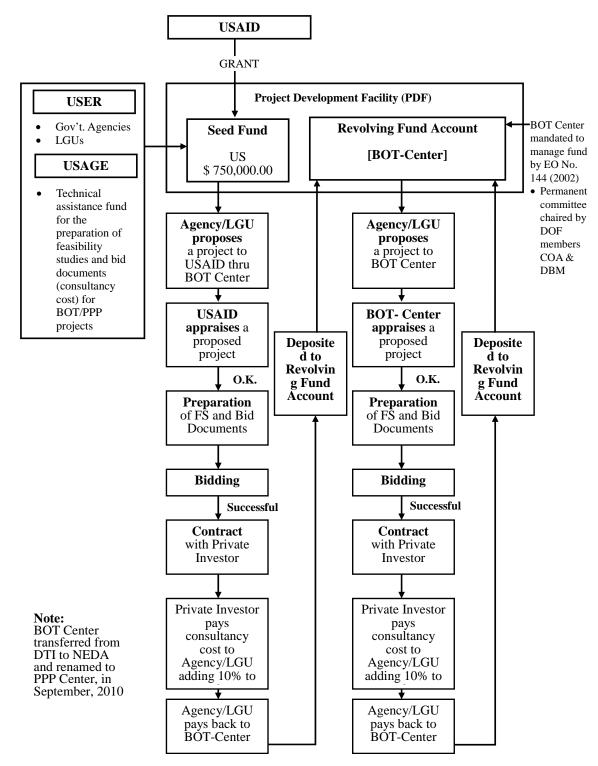
- The System should be developed so that revolving fund is surely created.
- BOT Center should prepare project selection criteria for PDF utilization.
- Standards Terms of Reference (TOR) for Business Case/Feasibility Study should be established. Complete study should be undertaken, so that Agency can proceed to the Tendering Stage soon after the completion of the study.
- BOT Center should undertake campaign of PDF to advocate Agencies for its use.

|  | Financing to the<br>Government   | Financing to the<br>Private Sector  |
|--|--|---|
| PROJECT<br>DEVELOPMENT<br>(Business Case<br>Study, Feasibility<br>Study, Tender<br>Assistance) | <ul> <li>Technical Assistance (Bi- &amp;<br/>Multi-lateral Agencies)</li> <li>Project Development Fund<br/>(PDF) at BOT Center (Existing)</li> <li>Philippine Infrastructure Facility<br/>(PFI) (under study by JICA)</li> <li>PDF Japan Fund for PPP<br/>Tollway Projects (Proposed<br/>by the Study Team)</li> <li>[Reference]</li> <li>Case of India - IIPDF</li> </ul> |   |
| IMPLEMENTATIO<br>N<br>(Design/Constructio<br>n/O & M)  | <ul> <li>Project Loan (Bi- &amp; Multi-lateral Agencies)</li> <li>Philippine Infrastructure Facility (PFI) (under study by JICA)</li> <li>PPP Infrastructure Development Fund (proposed by the Study Team)</li> </ul>  | <ul> <li>JICA Two Step Loan (TSL)</li> <li>Private Sector Financing by ADB &amp; IFC</li> <li>Philippine Infrastructure Facility (PFI) (under study by JICA)</li> <li>Creation of Government-owned PPP Project Financing Company (Proposed by the Study Team)</li> <li>JBIC: Financing for PPP infrastructure projects (tied to Japanese company)</li> <li>Nippon Export and Investment Insurance (NEXI) (tied to Japanese company)</li> <li>JICA Private-Sector Investment Finance (under study by JICA)</li> <li><b>[Reference]</b> <ul> <li>Agriculture Competitiveness Enhancement Fund, Philippines</li> <li>Case of India (IL &amp; FS, IDFC, VGF, IIFC)</li> <li>Case of Indonesia (PT SMI, PT IIF, PT PII)</li> </ul> </li> </ul> |

## TABLE9.3.3-1PPPPROJECTFINANCING

Source: JICA Study Team
Note: Black ----- Existing

**Red** ------ Not Existing Yet.



Source: Figure developed by the Study Team based on BOT Center information.

# FIGURE 9.3.4-1 OUTLINE OF PROJECT DEVELOPMENT FACILITY (PDF) IN THE PHILIPPINES

### 2) PDF Japan Fund for PPP Tollway Projects proposed by the Study Team

This is a proposed PDF by the Study Team and intended to be used only for PPP tollway projects. Concept of the facility is shown in **Figure 9.3.4-2**.

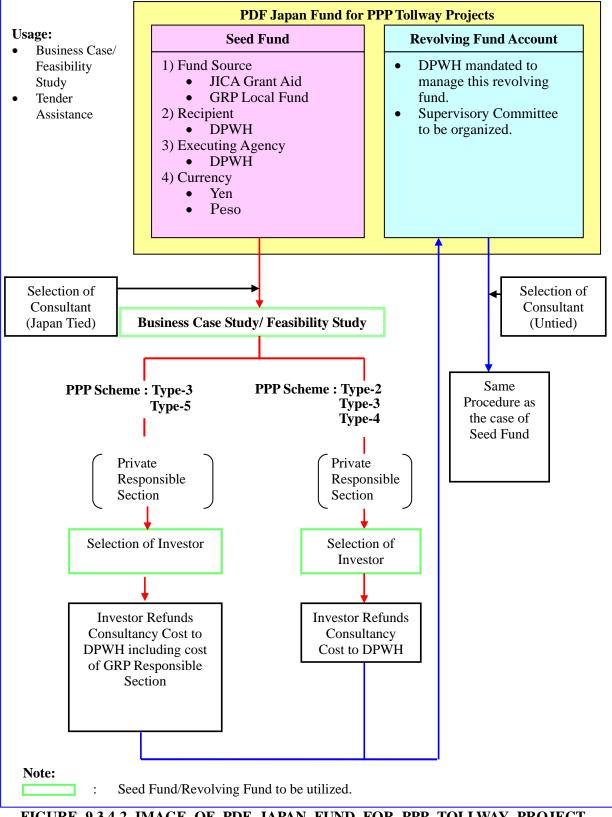


FIGURE 9.3.4-2 IMAGE OF PDF JAPAN FUND FOR PPP TOLLWAY PROJECT (PROPOSED BY STUDY TEAM)

#### 9.3.5 PPP Fund to Finance Government Expenditure during Project Implementation

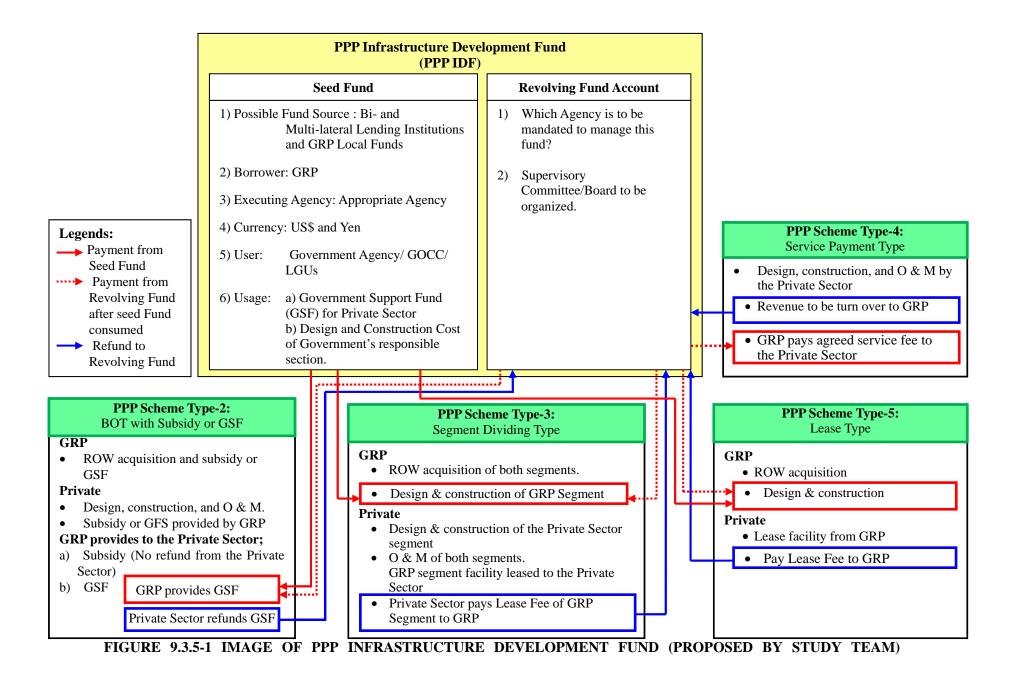
#### 1) PPP Infrastructure Development Fund Proposed By the Study Team

This fund is intended for financing Government's expenditure for PPP projects such as the government financial support for the private sector and/or design and construction cost for the Government's responsible portions. Image of the fund is shown in **Figure 9.3.5-1**. Mechanism to create revolving fund is shown in **Table 9.3.5-1**.

| TABLE 9.3.5-1 MECHANISM TO CREATE REVOL | VING FUND |
|---|-----------|
| -PPP Infrastructure Development Fund-   |           |

| PPP Modality   | Seed Fund<br>Usage                                | Revolving Fund   | Revolving Fund<br>Usage                      | Revolving Fund<br>Creation                               |
|--|---|--|--|--|
| <b>Type-2</b><br>BOT Type with<br>subsidy/<br>Government<br>Support Fund (GFS) | GSF from GRP to<br>Project Proponent              | Refund of GSF<br>from Project<br>Proponent               | GSF to Project<br>Proponent                  | Refund of GSF by<br>Project Proponent                    |
| <b>Type-3</b><br>Segment Dividing<br>Type                                      | Design and<br>Construction Cost<br>of GRP Segment | Lease Fee of GRP<br>Segment Paid by<br>Project Proponent | Design and<br>Construction of<br>GRP Segment | Lease Fee of GRP<br>Segment Paid by<br>Project Proponent |
| <b>Type-4</b><br>Service Payment<br>Type                                       | -   | -  | Service Fee paid to<br>Project Proponent     | Toll Revenue   |
| <b>Type-5</b><br>Lease Type  | Design and<br>Construction Cost                   | Lease Fee from<br>Project Proponent                      | Design and<br>Construction Cost              | Lease Fee from<br>Project Proponent                      |

Note: Proposed by the Study Team



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## 9.3.6 **PPP Fund to Finance the Private Sector**

#### 1) Existing Facilities to finance the Private Sector in the Philippines

#### **National Development Company (NDC)**

NDC is a 100% government financed company and attached to the Department of Trade and Industry (DTI). It was created to finance the private company, thus it can finance the private sector. One option of the Government is to strengthen NDC to finance the private sector for PPP projects. Outline of NDC is shown in **Table 9.3.6-1**.

| Functions  | <ul> <li>Attached company of the Department of Trade and Industry (DTI), managing about P 4.5 billion worth of investment portfolios.</li> <li>Its primary function is to undertake investments, including infrastructure projects where the private sector is unwilling to venture.</li> <li>The NDC had an initial capital stock of P50 million</li> </ul>   |  |
|--|--|--|
| Capitalization<br>History                        | The NDC had an initial capital stock of P50 million<br>Commonwealth Act 182, s.1936)<br>NDC's capitalization was increased to P200 million<br>Presidential Decree 668, s.1975)<br>The capitalization was further increased to P450 million<br>Presidential Decree 1169, s.1977) P210 million of the additional capitalization<br>vould be used as equity in a copper smelting project.<br>The authorized capitalization was further increased to P10 billion<br>Executive Order 680, s.1981) NDC assumes obligation of PNCC and PNOC.  |  |
| Source of<br>Income<br>Highlights<br>(1990-2004) | <ul> <li>NDC's income comes from the following sources: Gain on sales of assets,<br/>Interest on deposit, Foreign exchange gain, Rental and leasehold, Guarantee<br/>fees, Management fees, Dividends on stocks, Interest on loans, Interest from<br/>receivables and other Miscellaneous income.</li> </ul>   |  |
| Current<br>Project                               | <ul> <li>Alabang–Sto Tomas Development Inc (ASDI). ASDI is the project proponent<br/>of the Daang-Hari – SLEx Toll Road Project.</li> <li>San Carlos Bio-Energy Inc (SCBI). SCBI owns and operates an integrated<br/>ethanol distillery and power co-generation plant.</li> <li>One-DTI Building. Construction of building to consolidate the operations of<br/>DTI'S various offices currently located in Metro Manila to facilitate seamless<br/>transactions.</li> <li>National Irrigation Administration's (NIA) Irrigation Systems. NDC provide<br/>funding for the restoration and rehabilitation of existing communal irrigation<br/>systems of the NIA.</li> <li>Philippine Mining Development Corporation (PMDC). PMDC handles the<br/>mining interest of the DENR. It has the mandate to implement the<br/>development plan of Mt. Diwalwal with its exclusive mining rights in the area.</li> <li>PITC-Pharma Inc. (PPI). PITC Pharma is mandated to take the lead in the<br/>implementation of the government's Half-Priced Medicine Program.</li> </ul> |  |

## TABLE 9.3.6-1 OUTLINE OF NATIONAL DEVELOPMENT COMPANY (NDC)

Source: NDC Website

#### Agricultural Competitiveness Enhancement Fund (ACEF)

This is an example of existing fund for financing the private sector. This fund was created in the Department of Agriculture (DA). Outline of the fund is shown in **Figure 9.3.6-2.** 

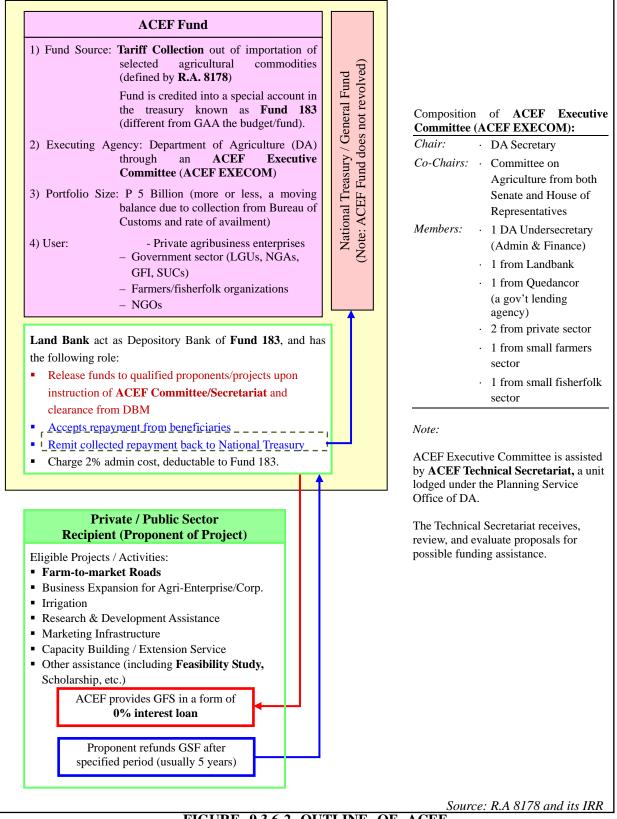


FIGURE 9.3.6-2 OUTLINE OF ACEF

|   |  | Proposed Measure:   |
|---|--|---|
| Notable<br>weakness   | Present set-up   | <b>Creation of an independent body</b><br><b>that will mange ACEF Fund,</b> with<br>the following legal identity to address<br>problem areas, to wit: |
| <ul> <li>No<br/>sustainability</li> </ul>                     | • The repayments collected from the GFS are reverted back to the National Treasury. The DA, as a line agency does not have the mandate to be directly engage in an income generating (e.g. lending) activities.  | <ul> <li>With corporate powers and mandate<br/>to manage Fund 183 as well as the<br/>repayment received;</li> </ul>                                   |
| <ul> <li>No fund<br/>management<br/>accountability</li> </ul> | <ul> <li>Decision making functions are<br/>performed by ACEF Committee.<br/>However, members of committee<br/>changes as most of them are holding<br/>other political/official functions.</li> </ul>   | <ul> <li>With permanent officials and<br/>personnel to establish<br/>accountability;</li> </ul>   |
| • Weak loan<br>security                                       | <ul> <li>Obligations of GFS recipient,<br/>including repayment schedules are<br/>defined in a MOA signed by both<br/>parties (Private Sector and DA,<br/>signed by the ACEF Committee).<br/>However, in the event of loan<br/>default, the legal identity of the<br/>Committee and the Secretariat to<br/>file charges is in question.</li> <li>Also, the DA as an agency has no<br/>mandate and power to collect for its<br/>possession the private sector's<br/>project equity.</li> </ul> | • With legal personality to enter into a<br>"concession type" of agreement in<br>lieu of the MOA.   |
|   | Note: ACEF fund assistance does not require collateral.  |   |

## Some issues of ACEF are shown in Table 9.3.6-1. TABLE 9.3.6-1 SOME ISSUES OF ACEF

Source: Documents of DA

## 2) Facilities under Study or Proposed Facility

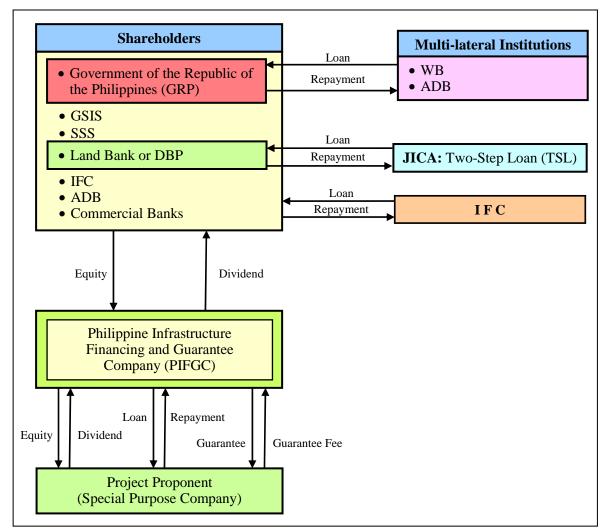
## **Philippine Infrastructure Facility (PIF) (under study by JICA)**

This facility is being studied by JICA. Outline concept is as follows:

- To be established in and managed by the Government Financial Institution (GFI).
- Financing structure will be composed of Infrastructure Revolving Fund (IRF) and Project Development Fund (PDF).
- Two-Step Loan for GFI and grant assistance to PDF is being studied.
- Target sectors will be i) transportation, ii) water and sanitation, iii) energy, iv)solid waste management, and v) other physical infrastructure.

## Creation of Government-owned PPP Financing Company (proposed by the study Team)

Although it is an option to create Government-owned PPP financing company or to strengthen the National Development Company (NDC), if creation of a new company is seeked, image of new company will be something like shown in **Figure 9.3.6-3**.



### FIGURE 9.3.6-3 CREATION OF GOVERNMENT-OWNED PPP FINANCING COMPANY (PROPOSED AS AN OPTION BY THE STUDY TEAM)

## 9.3.7 Examples of Infrastructure Fund of Other Country

## 1) India

## 1.1) Overview of the Existing Infrastructure Funds in India

In India, there exist several infrastructure funds as follows:

- ILFS: Infrastructure Leasing and Financial Services
- IDFC: Infrastructure Development Finance Company limited
- ➢ VGF: Viability Gap Funding
- > IIFC: India Infrastructure Finance Company limited
- IIPDF: India Infrastructure Project Development Fund

### (a) IL&FS: Infrastructure Leasing and Financial Services

#### **General Description**

IL&FS was established in 1987 for the purpose of financing infrastructure development undertaken by private sectors. Investors are Central Bank of India, Unit Trust of India and Housing Development Finance Corp. ltd. In 1993, additional investors such as IFC (International Finance Corporation) and ORIX Japan involved with investment. Total assets amounts to 657 billion Rs (Rupee) as of 2009.

### **Key Areas and Financed Projects**

The major infrastructure development areas with which IL&FS have been involved are power sector, transport sector including road/airports/seaports/railways, communication sector and industrial zone development sector. The lists of major projects financed by IL&FS are shown in **Table 9.3.7-1**.

| Name of the Financed<br>Projects | Outlines  | Amount of Finance |
|----------------------------------|---|-------------------|
| Ahmedabad - Mehsana<br>Toll Road | The road has 52.6 kilometre length with 4<br>lanes state highway linking Ahmedabad to<br>Mehsana, an important oil town to the north<br>of the city Construction was completed in<br>2001.  | Rs 3,050 million  |
| Delhi - Noida Toll<br>Bridge     | The first large private sector initiatives in<br>the surface transport sector in India.<br>Construction was completed in 2001.  | Rs 3,710 million  |
| East Coast Road                  | This was the road project for rehabilitation<br>and maintenance of the 113.2 km East<br>Coast Road (ECR) between the cities of<br>Chennai and Pondicherry. The project was<br>commissioned in March 2002.   | Rs 552 million    |
| Second Vivekananda<br>Bridge     | The project envisages a 6.1 km, integrated<br>6-lane bridge along with approach road<br>network. Construction was supposed to be<br>completed in 2007.  | Rs 6,470 million  |
| Vadodara Halol Road              | Widening and strengthening of 32 km of an existing 2-lane State Highway to a 4 lane expressway.   | Rs 1,611 million  |
| North Karnataka<br>Expressway    | Four lane, 77 km Expressway along<br>Belgaum-Maharashtra border. Construction<br>was completed in 2004.   | Rs.5,542 million  |
| West Gujarat<br>Expressway       | The project involves the widening of<br>existing Jetpur-Gondal Section from 2-Lane<br>to 4-Lane (26 km), improvement of the<br>existing 4-Lane Gondal-Rajkot Section (32<br>km) and widening of the existing Rajkot<br>bypass from 2-Lane to 4-Lane (10km) on<br>National Highway No. 8-B in Gujarat on<br>Build-Operate-Transfer (BOT) basis.<br>Construction was completed in 2008. | Rs 2,402 million  |

# TABLE 9.3.7-1 MAJOR EXAMPLES OF INFRASTRUCTURE DEVELOPMENTFINANCE (ROAD SUB-SECTOR)

Source: IL&FS Group Overview Presentation Material

## **Major Characteristics**

The major target borrowers are private sector companies which undertake infrastructure development business without heavy dependence on state expenditure. Therefore, IL&FS have attracted many private infrastructure contractors. On the other hand, since IL&FS is funded by many private investors including commercial banks, target projects are requested to secure high commercial profitability.

## (b) IDFC: Infrastructure Development Finance Company Limited

### **General Description**

IDFC was established in 1997 as an India Development Bank. Major shareholder are Ministry of Finance India, of whish share of stock holding is about 20%, commercial banks in India, IFC, ADB, Government of Singapore Investment Corporation and Commonwealth Development Corporation. IDFC plays roles of provision of long-term loan and guarantee for commercial risks.

### **Key Areas and Financed Projects**

The amount of approved projects in terms of Rs were 12,962 crore Rs as of 2010. Among them, 40% is in power sector, 25% is in communication sector, 20% is in transport sector and others are in urban development sector as shown in **Table 9.3.7-2.** 

| Target Sector        | Amount of loan approved as of 2010 |  |  |  |  |
|----------------------|------------------------------------|--|--|--|--|
| Target Sector        | [Crore Rs]                         |  |  |  |  |
| Power sector         | 4,112 (32%)                        |  |  |  |  |
| Communication sector | 3,670 (28%)                        |  |  |  |  |
| Transport sector     | 1,793 (14%)                        |  |  |  |  |
| Others               | 3,387 (26%)                        |  |  |  |  |
| Total                | 12,962 (100%)                      |  |  |  |  |

#### Major Characteristics

IDFC was founded under the Indian Governmental initiative. Therefore IDFC has functioned as public entity comparing to IL&FS. IDFC has been keeping prudent stance to the infrastructure development finance. Therefore the final approval for project loan takes much time and it is said that IDFC is lacking in business promoting mind.

## (c) VGF: Viability Gap Funding

#### **General Description**

VGF started to function in 2005 initiated by Indian Government. VGF aims at financially supporting private sector companies being engaged in infrastructure development projects, which are not financially viable. VGF is provided for private sector companies which are selected through a process of open competitive bidding. VGF is provided in the form of a capital grant at the stage of project construction. In order to secure VGF from the Indian Government, the candidate private sector company must submit proposals of the financial support to the Indian Government and sanctioned with the approval of Finance Minister on case-by-case basis. The limit of the grant is 20% of all project costs including not only construction costs but also operation/management costs.

## Key Areas and Financed Projects

As of 2008, PPP projects were 234 approved. Among them, 180 are road projects, 37 are seaport projects, 5 are airport projects, 3 are railway projects and 9 are urban development projects. The projects, which were approved as VGF projects from above PPP projects, were13 for expressway projects and 1 for railway project. Total amount of approved VGF finance was 3,100 crore Rs.

### **Major Characteristics**

As for VGF, some weak points have been pointed out. For instance, there remains ambiguity in approval process, the amount of VGF is not large enough comparing to the total project costs. In addition, such criticism has been sprung up that VGF may deteriorate project companies' commercial mind and it may brings about moral hazard.

### (d) IIFCL: India Infrastructure Finance Company Limited

### **General Description**

IIFCL was established in January 2006 as a state owned enterprise. IIFCL is functioning as a long-term loan provider for infrastructure development project undertaken by private sector companies. Funding sources come from the Government of India, the World Bank, ADB and commercial banks in India. The conditions for the finance are as follows:

- (i) Eligible projects are infrastructure development projects undertaken by private sector companies and its financial viability must be secured.
- (ii) The amount of finance must be up to 20% of total project costs
- (iii) IIFCL can provide loan directly or indirectly (via commercial banks) to the private company

#### **Key Areas and Financed Projects**

The major infrastructure development areas with which IL&FS have been involved are power sector, transport sector including roads, bridges, railways, airports and seaports, water sector and urban development sector. The amount of loan for approved projects was 9,856 crore Rs as of 2010.

#### **Major Characteristics**

IIFCL is a public corporation. Therefore its function has strong public characteristics. Target projects for loan must be the listed projects in the five-year plan for infrastructure development which is approved by the Infrastructure Committee of the Government India. In that sense, IIFCL is not much flexible for private sector companies and loan target projects are limited.

#### (e) IIPDF: India Infrastructure Project Development Fund

#### **General Description**

IIPDF was established by the Government of India, Ministry of Finance in December, 2007. The funding sources of IIPDF come from Ministry of Finance India and the multilateral and bilateral agencies. IIPDF's primary objective is to fund potential infrastructure PPP projects development expenses including cost of engaging consultants and transaction advisors. More

specifically, IIPDF is available to the Sponsoring Authority including State Government and Local Authorities, who incur the project development expenses with respect to conduct of feasibility studies, environment impact assessment, financial structuring, legal reviews and project documents development.

IIPDF is envisaged as a revolving fund and it must be replenished by the reimbursement of investment through success fee earned from successful bid projects. However, in case of failure of the bid, the fund would not be recovered.

The fund assists up to 75% of the project development expenses to the Sponsoring Authorities.

#### Key Areas and Financed Projects

The target infrastructure development projects must be PPP projects regardless of the sectors. The amount of support for approved projects was 100 crore Rs and total amount disbursed was 7 crore Rs as of 2010.

## **Major Characteristics**

IIPDF is a fund for only sponsoring authorities. Therefore IIPDF is not available for a private sector company.

### **1-2)** Relationships and Responsibility Sharing

Currently, above mentioned infrastructure funds are coexisting and providing financial support for private sector companies which are getting involved with infrastructure development. According to the existing available information sources which are open to public, any specific demarcation and responsibility sharing among them could not be recognized. However, characteristics of each of them are different from the viewpoint of funding sources and purpose of the finance. As for funding sources, as seen above sections, there exist some different types of funding sources such as direct drawing down from the state budget managed by Ministry of Finance in India, investment of commercial banks and investment of international donor agencies. Depending on such funding sources, fund managing entities have variety of management schemes such as pure private sector company type, national corporation type and joint stock company type. In addition, as for purpose of the finance, mainly two types can be recognized, that is to say, one is to support private sector companies at the implementation stage including mainly construction phase, and the other is to support contracting agency, which are mainly local authority, at the project design and contracting stage. Infrastructure funds in India can be classified in terms of above-mentioned characteristics.

#### 2. Indonesia

## 2.1 Overview of the Existing Infrastructure Funds in Indonesia

In Indonesia, there exist 2 infrastructure finance companies and 1 infrastructure financial guarantee company as follows:

Infrastructure Financing Company
 PT SMI: PT Sarana Multi Infrastruktur
 PT IIF: PT Indonesia Infrastructure Finance
 Infrastructure Finance Guarantee Company
 PT PII: PT Penjaminan Infrastruktur Indonesia

### (a) PT SMI: PT Sarana Multi Infrastruktur

### **General Description**

PT SMI was established in February, 2009 for the purpose of financing infrastructure development undertaken by private sector companies. PT SMI is a state owned enterprise. PT SMI is functioning as a provider of project loans directly to the private sector companies who are engaged in infrastructure development in Indonesia.

#### Key Areas and Financed Projects

The target infrastructure development projects must be PPP projects. Since PT SMI was established in 2009, there has no business record of the loan.

### **Major Characteristics**

PT SMI is designed to be operated synergistically and complementary with PT IIF, which is described as below.

### (b) PT IIF: PT Indonesia Infrastructure Finance

### **General Description**

PT IIF was established in January, 2010 for the purpose of financing infrastructure development undertaken by private sector companies. PT IIF's financing capacity is supported by PT SMI, international donor agencies such as ADB and IFC, and DEG (a German investment company). PT IIF distributes its funding sources to the private sector companies engaged in infrastructure development in the form of long-term (longer than 10 years) debt instruments, equity participation and financing guarantee mostly aiming at alleviation of commercial risks.

## Key Areas and Financed Projects

The target areas are overall infrastructure development undertaken by private sector companies including power sector, water sector, transport sector including roads and airports. Capital on the establishment of PT IIF is 100 billion Rp, which consists of 40 billion IDR coming from PT SMI, 20 million IDR comes from each of ADB, IFC and DEG. Since PT IIF was established in 2010, there has no business record of the loan.

#### **Major Characteristics**

PT IIF was established as a subsidiary company of PT SMI. PT IIF is designed to be operated synergistically and complementary with PT SMI. PT IIF has the support and commitment from Government of Indonesia through PT SMI and other international financial institutions as its founder shareholders. Therefore it would be able to broaden its shareholder base and increase its capital further by inviting other private sector investors. However the functions of PT IIF might be duplicated with the one of PT SMI. Role sharing between two of them should be clearly articulated.

## (c) PT PII: PT Penjaminan Infrastruktur Indonesia

#### **General Description**

PT PII was established in December, 2009 for the purpose of operation and management of Indonesia Infrastructure Guarantee Fund (IIGF) which functions as a guarantee provider for alleviation of political risks including land acquisition delay or failure, permits delay or failure, change in law, breach of a contract, failure with integrate with existing infrastructure and contract termination risks. Funding sources of IIGF comes from Ministry of Finance Indonesia through PT IIF, the World Bank, Tamasek Foundation Singapore and Singapore Cooperation Enterprise (SCE). In addition to support on guarantee capacity of IIGF, the World Bank together with Singapore Cooperation Enterprise provides technical assistance to improve institutional capacity of IIGF.

### **Key Areas and Financed Projects**

The target areas are overall infrastructure development undertaken by private sector companies. The Government of Indonesia injected capital of 1 trillion Rp through state budget in 2009. And it is expected that additional 1 trillion Rp will be added from state budget in 2010. Since PT PII was established in December 2009, there has no business record of the loan up to now.

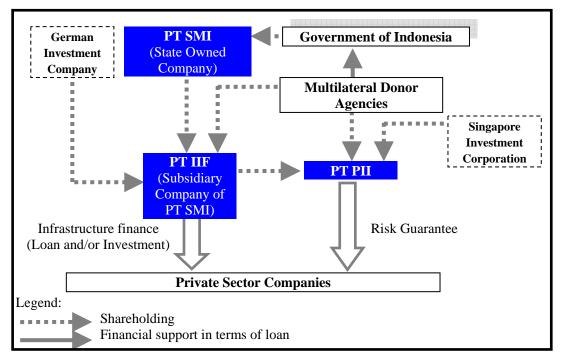
### **Major Characteristics**

The IIGF provides guarantee cover to the private sector against risks arising from government actions. Specifically, IIGF covers risks against land acquisition delay/failure, permits delay/failure, change in law, breach of contract, failure with integrate with infrastructure network, and contract termination.

#### 2.2 Relationships and Responsibility Sharing

As discussed above section, there exist three infrastructure funds in Indonesia. As for relationships among them, •PT IIF is a subsidiary state owned company invested from PT SMI. And PT PII, which is functioned as a infrastructure guarantee finance company is invested by both PT SMI and PT PII. Relationships among those three companies in terms of shareholding structure are shown in **Figure 9.3.7-1**.

Above mentioned infrastructure funds are coexisting and providing financial support for private sector companies which are engaged in infrastructure development. Characteristics of each of them are different from the viewpoint of funding sources and purpose of the finance. As for funding sources, as seen above sections, there exist some different types of funding sources such as direct drawing down from the state budget managed by Ministry of Finance in Indonesia, investment of commercial investment company and investment of international donor agencies. In addition, as for purpose of the finance, mainly two types can be recognized, that is to say, one is to support private sector companies at the implementation stage including mainly construction phase, and the other is to provide risk guarantee. Infrastructure funds in Indonesia can be classified in terms of above-mentioned characteristics.





## **Summary**

Above-mentioned infrastructure funding schemes established in India and Indonesia can be classified in terms of 1) fund management entities and 2) financing scheme. Basically, such classifications have six different kinds of categories stated as follows:

## (a) Classification from the viewpoint of Fund Management Entity

#### **Type-1: Funding Scheme Managed by pure Private Sector Company**

In this type, a pure Private Sector Company is engaged in management of infrastructure finance including loan and investment. This type includes "Infrastructure Leasing and Financial Services limited (IL&FS)" in India. There exist similar financing companies in other countries such as "Macquarie Group" in Australia, "Babcock & Brown" in Australia, "CDC Group" in UK, "3i" in UK and "Darby Private Equity" in US. These infrastructure financing companies intend to seek profitability through infrastructure financing business. Therefore they intend to take commercial profitability seriously in case of selection of target projects for loan and/or investment. Funding sources varies from the Government support to commercial investment fund and corporate bonds.

#### **Type-2: Funding Scheme Managed by State Owned Enterprise (SOE)**

This case is that State Owned Enterprise (SOE) or Government Owned and Controlled Company (GOCC) is responsible for fund management. This type includes "India Infrastructure Finance Company limited (IIFCL)" in India and "PT Sarana Multi Infrastruktur (PT SMI)" in Indonesia and "National Development Corporation (NDC)" in the Philippines. Funding sources come from mainly direct expenditure of the Government partially financed by international donor agencies. The target projects for financing tend to be required public feature rather than business profitability, which is different from the characteristics of Type-1 discussed above.

## **Type-3 : Funding Scheme Managed by Public Development Financial Entity**

This type falls in between Type-1 and Type-2. Funding management entity is quasi-public and quasi-private entity. This type includes "Infrastructure Development Finance Company limited (IDFC)" in India. As seen above section, IDFC was established in 1997 as the India Development Bank. Major shareholder is the Ministry of Finance in India (share of stock holding is 20%), and other shareholders are commercial banks in India, International donor agencies including IFC, ADB ,and Government of Singapore Investment Corporation and Commonwealth Development Corporation. This type also regards public feature as important rather than project profitability when target project for financing is selected.

## **Type-4 : Government Direct Support**

Typical funding scheme falling in this type is "Viability Gap Funding (VGF)" in India. As discussed in above section, VGF was introduced in 2005 in India as a direct financial support implemented by the Government of India. Obviously the funding sources of this scheme come from state budget and selection of the target project for support is required public feature.

## (b) Classification from the Viewpoint of the Financing Scheme

Above-mentioned four types are implemented through loan and/or investment. And financing target is the project implementation mainly for construction phase. In addition, some other financing schemes exist including financing for risk guarantee and financing for project development phase. These are discussed as follows:

## **Type-5 : Financing Scheme for Risk Guarantee**

This type is for mainly guarantee fund covering so-called sovereign risks including political risk, institutional risk and country risk. This type includes "Indonesia Infrastructure Guarantee Fund (IIGF)" in Indonesia. IIGF is managed by "PT Penjaminan Infrastruktur Indonesia (PT PII)", which is a state owned enterprise. Funding source come from Ministry of Finance in Indonesia, International Donor Agencies and Singapore Investment Corporation. In Japan, there exist similar kind of guarantee financing scheme such as "Nippon Export and Investment Insurance (NEXI)".

## <u>Type-6 : Project Development Financing</u>

This type is a financing scheme for support the cost expended at the project development phase such as project F/S implementation and bidding/contract document development. This type includes "India Infrastructure Project Development Fund (IIPDF)" in India and "Project Development Fund (PDF)" in India and the Philippines. In case of IIPDF in India, the Government of India provides direct financing support from the state budget. Support targets are contracting agencies including local authority of which budget is quite limited.

Overall characteristics and features of infrastructure funds introduced in India and Indonesia are summarized in Table 9.3.7-3.

| Name of<br>the Fund | Year of<br>Establishment | Funding Sources  | Major Functions  | Business records   | Advantages and shortcomings   | Applicability to the Toll<br>Road Projects in the<br>Philippines  |  |  |  |
|---------------------|--------------------------|--|--|--|---|---|--|--|--|
| The Case in India   |                          |  |  |  |   |   |  |  |  |
| ILFS                | 1987                     | <ul> <li>Central Bank of<br/>India</li> <li>Unit Trust of<br/>India</li> <li>Housing<br/>Development<br/>Finance Corp.</li> <li>IFC</li> <li>ORIX Japan</li> </ul>   | Provision of<br>long-term loan for<br>infrastructure<br>development<br>undertaken by<br>private sector<br>companies. | Many records in many<br>infrastructure development<br>fields, for instance, in road<br>sector, there were such records<br>as Ahmedabad-Mehsana Toll<br>Road(Rs 3,050 million),<br>Delhi-Noida Toll Bridge<br>(Rs 3,710 million), East Coast<br>Road(Rs 552 million), Second<br>Vivekananda Bridge(Rs 6,470<br>million), Vadodara Halol<br>Road(Rs 1,611 million), North<br>Karnataka Expressway<br>(Rs 5,542 million),<br>West Gujarat Expressway<br>(Rs 2,402 million) and the like | IL&FS have attracted many<br>private infrastructure<br>contractors. On the other hand,<br>IL&FS was funded by many<br>private investors including<br>commercial banks. Therefore,<br>target projects are requested to<br>secure high commercial<br>profitability. In that sense,<br>target projects are may be<br>limited to high profitable<br>projects. | IL&FS is a pure private<br>entity. Therefore, private<br>infrastructure finance<br>company like IL&FS is<br>possible to be established in<br>the Philippines if there exist<br>such interested private<br>business entity, although<br>some governmental<br>budgetary support might be<br>necessary.      |  |  |  |
| IDFC                | 1997                     | <ul> <li>Ministry of<br/>Finance India</li> <li>Indian<br/>commercial banks</li> <li>IFC</li> <li>ADB</li> <li>Government of<br/>Singapore<br/>Investment<br/>Corporation</li> <li>Commonwealth<br/>Development<br/>Corporation</li> </ul> | Provision of<br>long-term loan and<br>guarantee for<br>commercial risks  | The amount of approved<br>projects in terms of Rs were<br>12,962 crore Rs as of 2010.<br>Among them, 40% is in power<br>sector, 25% is in<br>communication sector, 20% is<br>in transport sector and others<br>are in urban development sector   | IDFC was founded under the<br>Indian Governmental<br>initiative. Therefore IDFC has<br>functioned as public entity<br>comparing to IL&FS.<br>Therefore the final approval<br>for project loan takes much<br>time and it is said that IDFC is<br>lacking in business promoting<br>mind.  | IDFC is a state owned<br>enterprise. It can be said that<br>IDFC is quite similar to the<br>NDC (National<br>Development Company) in<br>the Philippines. Therefore<br>activation of NDC can be<br>one of the easiest way to<br>contribute to promote<br>infrastructure development<br>in the form of PPP. |  |  |  |

## TABLE 9.3.7-3 SUMMARY OF THE OUTLINE OF INFRASTRUCTURE DEVELOPMENT FINANCING COMPANIES

| Name of the Fund | Year of<br>Establishment | Funding Sources   | Major Functions  | Business records  | Advantages and shortcomings   | Applicability to the Toll Road<br>Projects in the Philippines   |
|------------------|--------------------------|---|--|---|---|---|
| VGF              | 2005                     | • Ministry of<br>Finance India  | Provision of capital<br>grant, of which<br>amount is up to<br>20% of all project<br>costs                            | As of 2008, the projects,<br>which were approved as<br>VGF projects from<br>above PPP projects,<br>were13 for expressway<br>projects and 1 for<br>railway project. Total<br>amount of approved<br>VGF finance was 3,100<br>crore Rs | As for VGF, some weak points<br>have been pointed out such that.<br>there remains ambiguity in<br>approval process, the amount of<br>VGF is not large enough<br>comparing to the total project<br>costs. In addition, such criticism<br>has been sprung up that VGF may<br>deteriorate project companies'<br>commercial mind and it may<br>brings about moral hazard. | VGF is a full governmental<br>support scheme. This is a kind<br>of governmental subsidy.<br>There exists similar subsidy<br>related scheme was introduced<br>in LRT No.3 in manila Metro,<br>which was operated in the<br>form of BLT (Built, Lease and<br>Transfer). Therefore this<br>scheme may be possible to be<br>introduced. However, the<br>application process and<br>decision criteria for the size of<br>the subsidy should be<br>carefully established. |
| IIPDF            | 2007                     | • Ministry of<br>Finance India  | To finance the cost<br>of project<br>development e.g.<br>F/S costs<br>undertaken by<br>concerned<br>authorities      | The amount of support<br>for approved projects<br>was 100 crore Rs and<br>total amount disbursed<br>was 7 crore Rs as of<br>2010.   | IIPDF is a fund for only<br>sponsoring authorities. Therefore<br>IIPDF is not available for a private<br>sector company.  | In the Philippines, BOT center<br>has already been having<br>similar functions.   |
| IIFCL            | 2006                     | <ul> <li>Ministry of<br/>Finance India</li> <li>Indian<br/>commercial banks</li> <li>The World Bank</li> <li>ADB</li> </ul> | Provision of<br>long-term loan for<br>infrastructure<br>development<br>undertaken by<br>private sector<br>companies. | The amount of loan for<br>approved projects was<br>9,856 crore Rs as of<br>2010.  | IIFCL is a public corporation.<br>Therefore its function has strong<br>public characteristics. Target<br>projects for loan must be the listed<br>projects in the five-year plan for<br>infrastructure development. In that<br>sense, IIFCL is not much flexible<br>for private sector companies and<br>loan target projects may be limited.                           | IIFCL is a state owned<br>enterprise. It can be said that<br>IIFCL is quite similar to the<br>NDC in the Philippines.<br>Therefore activation of NDC<br>can be one of the easiest way<br>to contribute to promote<br>infrastructure development in<br>the form of PPP.  |

## TABLE 9.3.7-3 SUMMARY OF THE OUTLINE OF INFRASTRUCTURE DEVELOPMENT FINANCING COMPANIES (Continued)

| Name of<br>the Fund   | Year of<br>Establishment | Funding Sources   | Major Functions   | Business records    | Advantages and shortcomings  | Applicability to the Toll Road<br>Projects<br>in the Philippines  |  |  |  |
|-----------------------|--------------------------|---|---|---------------------|--|---|--|--|--|
| The Case in Indonesia |                          |   |   |                     |  |   |  |  |  |
| PT SMI                | 2009                     | • Ministry of<br>Finance Indonesia  | Provision of<br>long-term loan and<br>guarantee for<br>commercial risks | No records thus far | PT SMI is designed to be operated<br>synergistically and complementary<br>with PT IIF, which is described as<br>below.   | PT SMI is a state owned<br>enterprise. It can be said that<br>PT SMI is quite similar to the<br>NDC in the Philippines.<br>Therefore activation of NDC<br>can be one of the easiest ways<br>to contribute to promote<br>infrastructure development in<br>the form of PPP.   |  |  |  |
| PT IIF                | 2010                     | <ul> <li>Ministry of<br/>Finance Indonesia<br/>via PT SMI</li> <li>ADB</li> <li>IFC</li> <li>DEG(German<br/>private<br/>investment<br/>company</li> </ul>                           | Provision of<br>long-term loan and<br>guarantee for<br>commercial risks | No records thus far | PT IIF is designed to be operated<br>synergistically and complementary<br>with PT SMI. However the<br>functions of PT IIF might be<br>duplicated with the one of PT SMI.<br>Role sharing between two of them<br>should be clearly articulated.   | PT IIF is a state owned<br>enterprise. It can be said that<br>PT IIF is quite similar to the<br>NDC in the Philippines.<br>Therefore activation of NDC<br>can be one of the easiest way<br>to contribute to promote<br>infrastructure development in<br>the form of PPP.    |  |  |  |
| PT PII                | 2009                     | <ul> <li>Ministry of<br/>Finance Indonesia</li> <li>the World Bank</li> <li>Tamasek<br/>Foundation<br/>Singapore</li> <li>Singapore<br/>Cooperation<br/>Enterprise (SCE)</li> </ul> | Management of<br>IIGF for alleviation<br>of political risks             | No records thus far | The IIGF provides guarantee<br>covering the private sector against<br>risks arising from government<br>actions. This is expected to<br>function as a PPP catalyst,<br>however, the final risk taker is<br>determined to be the Government.<br>Therefore state budget load might<br>be increased. | IIGF's financing sources are<br>coming from not only the<br>Government but also overseas<br>private financial institutions<br>and international donors. This<br>scheme can be introduced in<br>the Philippines if there exist<br>such interested financial<br>institutions. |  |  |  |

### TABLE 9.3.7-3 SUMMARY OF THE OUTLINE OF INFRASTRUCTURE DEVELOPMENT FINANCING COMPANIES (Continued)

## **CHAPTER 10**

# ROADMAP FOR PROMOTION OF PPP PROJECTS

## CHAPTER 10 ROADMAP FOR PROMOTION OF PPP PROJECTS

### 10.1 ROADMAP FOR PROMOTION OF PPP PROJECTS

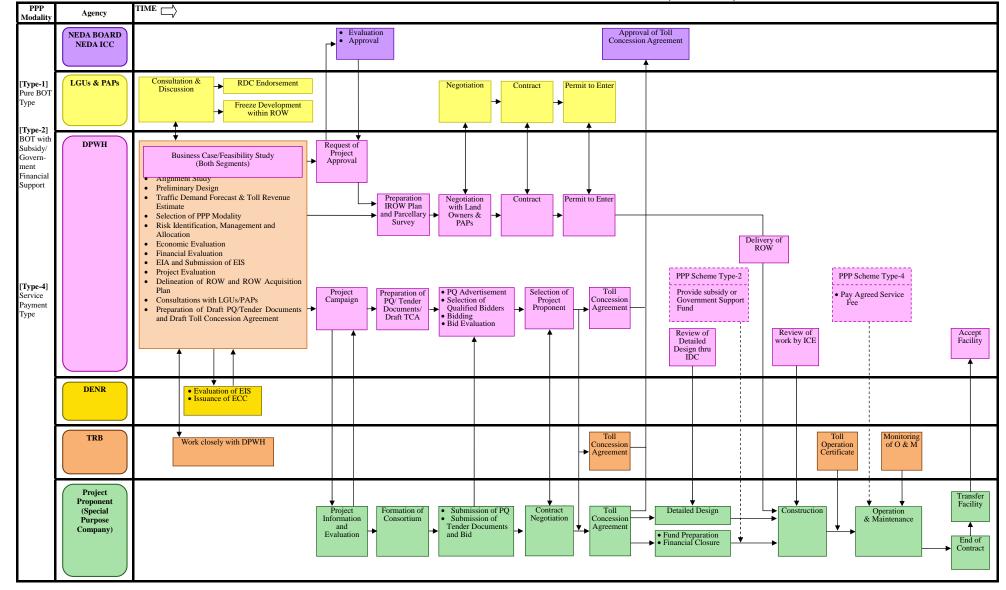
Based on the identified issues and bottlenecks and recommended measures to remove or mitigate them, a roadmap for promotion of PPP projects was developed as shown in **Table 10.1-1.** 

|  |  | Time Frame |              |              |              |              |              |              |
|--|--|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Category   | Items  |            | Year<br>2011 | Year<br>2012 | Year<br>2013 | Year<br>2014 | Year<br>2015 | Year<br>2016 |
| 1.Legal<br>Framework                                       | 1.1 Amendment of IRR of R.A. 7718 (BOT Law).   |            |              |              |              |              |              |              |
|  | 1.2 Amendment of Guidelines and Procedure of E.O. 423, series of 2005.   |            |              |              |              |              |              |              |
|  | <ul> <li>1.3 Amendment of E.O. 144, series 2002, BOT<br/>Center. (Already done)</li> </ul>   |            |              |              |              |              |              |              |
|  | 1.4 Amendment of R.A. 7718 and create New<br>PPP Law.  |            |              |              |              |              |              |              |
| 2. Institutional<br>Framework                              | 2.1 BOT Center to be renamed to PPP Center<br>and transferred from DTI to NEDA (in<br>relation to 1.3 above) (Already done)                          |            |              |              |              |              |              |              |
|  | 2.2 DPWH Planning Service (PS) to be<br>strengthened by integrating PMO-FS and<br>ESSO.  |            |              |              |              |              |              |              |
|  | <ul><li>2.3 DPWH PMO-BOT to be strengthened and upgraded to PPP Service.</li><li>2.4 DPWH PMO-IROW to be integrated in</li></ul>                     |            |              |              |              |              |              |              |
|  | Legal Service.   |            |              |              |              |              |              |              |
| <ol> <li>Capacity<br/>Development<br/>Framework</li> </ol> | 3.1 Core staff of DPWH, NEDA, DOTC, and<br>TRB to be trained for Planning and<br>Implementation of PPP Projects.                                     |            |              |              |              |              |              |              |
|  | 3.2 DPWH Regular Training Course for<br>Planning and Implementation of PPP<br>projects to be established.  |            |              | -            |              |              |              |              |
|  | 3.3 Implementation of DPWH Training Course (to be held annually).  |            |              |              |              |              |              |              |
|  | 3.4 NEDA to undertake Seminars on the<br>updated ICC Project Evaluation Procedures<br>and Guidelines for PPP projects.                               |            |              |              |              |              |              |              |
| 4. PPP Fund<br>Creation                                    | 4.1 Project Development Fund (PDF) of PPP<br>Center to be revitalized.   |            |              |              |              |              |              |              |
|  | 4.2 PPP Project Implementation Fund to finance<br>the Government's financial support to be<br>studied.   |            |              |              |              |              |              |              |
|  | 4.3 Government-owned special company to finance the Private Sector to be studied.  |            |              |              |              |              |              |              |
| of various   | 5.1 NEDA to update ICC Project Evaluation<br>Procedures and Guidelines for PPP Projects.   |            |              |              |              |              |              |              |
| Manuals  | <ul><li>5.2 Bureau of Design (BOD) of DPWH to<br/>prepare Design Standards for Toll Roads.</li><li>5.3 PS of DPWH to prepare Standard Pre-</li></ul> |            |              |              |              |              |              |              |
|  | qualification and Tender Documents<br>including Concession Agreement for various<br>types of PPP Modality.   |            |              |              |              |              |              |              |
|  | 5.4 PS of DPWH to prepare tollway O & M<br>Manual.   |            |              |              |              |              |              |              |
|  | 5.5 PS of DPWH to update Infrastructure Right-<br>of-Way (IROW) Procedural Manual.   |            |              |              |              |              |              |              |

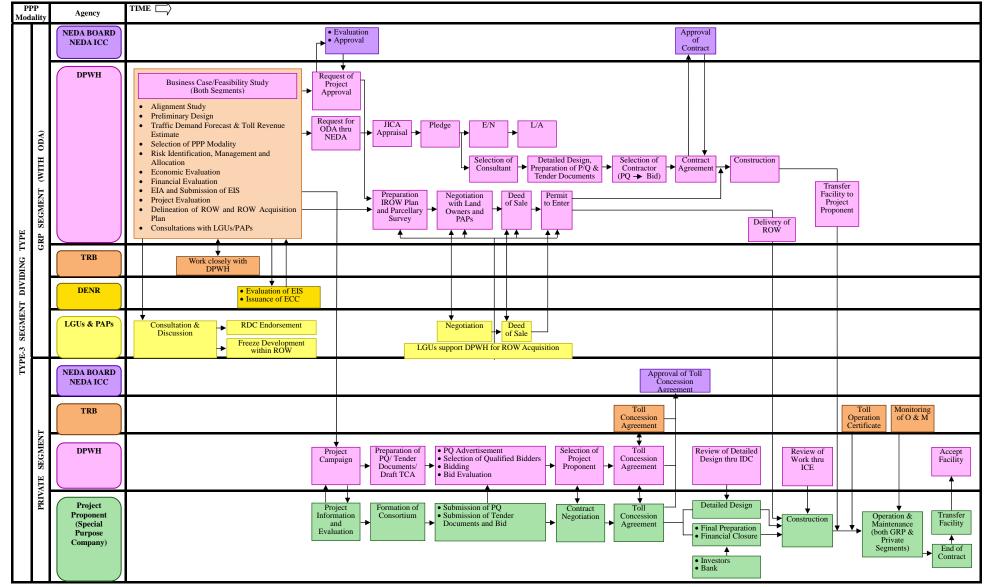
 TABLE 10.1-1
 ROADMAP
 FOR
 PROMOTION
 OF
 PPP
 PROJECTS

## 10.2 PPP PROJECT IMPLEMENTATION PROCEDURE

Implementation procedure of PPP projects is presented in **Tables 10.2-1** to **10.2-3** by the type of PPP modality. **Table 10.2-1** shows implementation procedure of PPP modality of Type-1, 2, and 4. Table shows implementation procedure as well as agencies concerned at each milestone of PPP procedure. **Table 10.2-2** show these for PPP modality of Type-3, and **Table 10.2-3** for Type-5.



#### TABLE 10.2-1 PPP PROJECT IMPLEMENTATION PROCEDURE: TYPE-1, TYPE-2, AND TYPE-4



#### TABLE 10.2-2 PPP PROJECT IMPLEMENTATION PROCEDURE: TYPE-3 SEGMENT DIVIDING TYPE

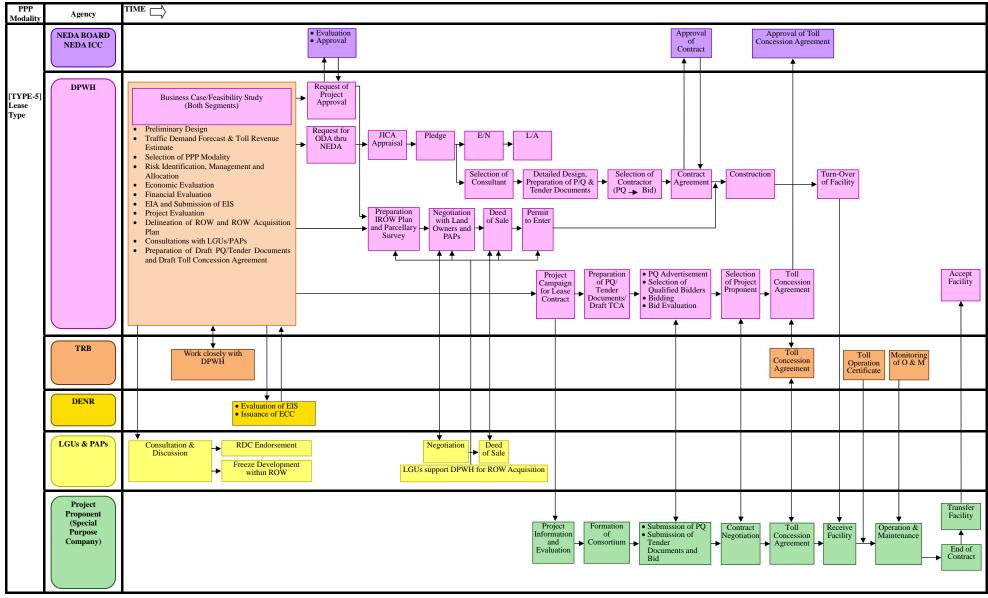


TABLE 10.2-3 PPP PROJECT IMPLEMENTATION PROCEDURE: TYPE-5 LEASE TYPE

## 10.3 ROADMAP FOR IMPLEMENTATION OF SELECTED 3 PROJECTS

Three (3) projects were recommended as priority projects for possible ODA funding. Proposed implementation schedule of CALA Expressway, NAIA Expressway Phase II and CLEx Phase I is shown in **Table 12.2-1**, **2** and **3**, respectively. Three (3) projects need to undertake the following preparatory or feasibility study prior to bidding:

## 1) CALA Expressway

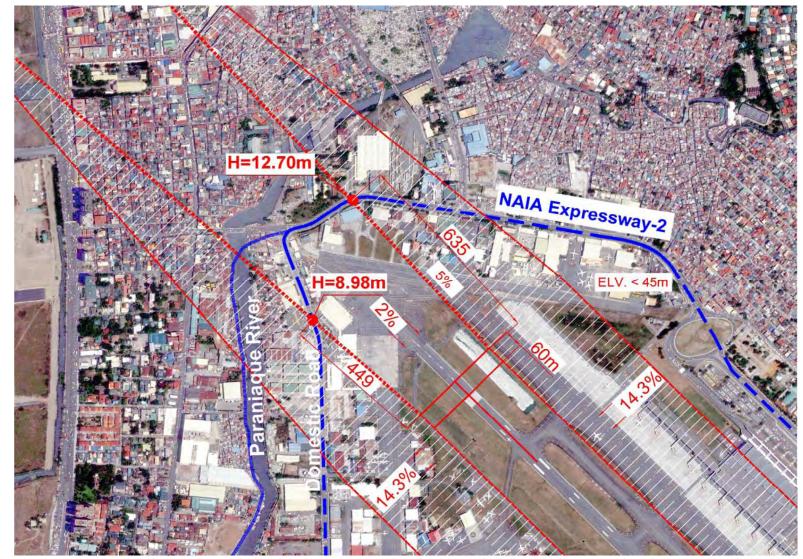
- At present, there is no latest feasibility study.
- Feasibility study of Manila side section is undertaken by WB Technical Assistance from November 2010 to June 2011. Feasibility study of Laguna side section should be also undertaken almost simultaneously with Manila side section.
- Proper coordination with the Manila side FS team and the Laguna side FS team should be made, particularly on the following:
  - Selection of route alignment in due consideration of latest and future development of the corridor/locations of interchanges
  - Re-examination of traffic attracted to the Expressway
  - Re-examination of toll revenue estimate
  - PPP modality to be adopted for full section of the Expressway
  - Re-examination of financial viability
  - Preparation of tender documents based on the selected PPP modality
  - Preparation of ROW limit map
  - Preparation of necessary documents for securing ECC, LGUs endorsements, etc.

#### 2) NAIA Expressway

- Feasibility study undertaken in 2010 needs to be reviewed on the following:
  - Route alignment in due consideration of NAIA Airport's air navigational clearance
  - Coordination with DOTC regarding structural configuration between LRT Line-1 South Extension and NAIA Expressway
  - Method how to connect with Phase I (a portion of Phase I may be required to be demolished)
  - Selection of location of on- and off-ramps
  - Re-examination of traffic attracted to the expressway and estimated toll revenue
  - Appropriate amount of the Government's subsidy or the Government's financial support
  - Re-examination of financial viability
  - Preparation of tender documents
  - Preparation of ROW limit map
  - Preparation of necessary documents for securing ECC, LGUs endorsements, etc.

## 3) CLEx, Phase I

- Feasibility study undertaken in 2010 needs to be reviewed on the following:
  - Re-examination of traffic attracted to the expressway
  - Facility to be initially 2-lane with an overtaking lane at strategic location or 4-lane
  - Interchange configuration at Cabanatuan City and possible change of an alignment
  - Need to add one more interchange between Tarlac City and Cabanatuan City
  - Re-examination of toll revenue estimate
  - Re-examination of financial viability under the lease type
  - Preparation of ROW limit map
  - Preparation of necessary documents for securing ECC, LGUs endorsements, etc.



Note : Air navigational clearance was calculated on the assumption that elevation of the runway is the same as that of Domestic Road Source: The Study Team

FIGURE 10.3-1 AIR NAVIGATIONAL CLEARANCE OF NAIA

|               | IAD               | IABLE 10.3-1 FROPOSED IMPLEMENTATION SCHEDULE: CALA EAFRESSWAT                                    | SCHE | <u>arn</u> n | ". CA. | LAEA | LIKES       | IAVO   | _        |      | -    | ſ    |
|---------------|-------------------|---|------|--------------|--------|------|-------------|--------|----------|------|------|------|
| Project       | Segment           | Activities  | 2010 | 2011         | 2012   | 2013 | 2014 2      | 2015 2 | 2016 2   | 2017 | 2018 | 2019 |
| CALA          |                   | Feasibility Study   |      |              |        |      |             |        |          |      |      |      |
| Expressway    |                   | Project Proposal by DPWH to NEDA  |      |              |        |      |             |        |          |      |      |      |
|               | noii              | NEDA Board Approval   |      |              |        |      |             |        |          |      |      |      |
| [Proposed     | Sec               | Request to ODA Loan   |      |              | _      |      |             |        |          |      |      |      |
| PPP Modality] |                   | Appraisal of the Project by ODA Agency  |      |              |        |      |             |        |          |      |      |      |
| Tvpe-3:       |                   | Pledge, E/N, L/A  |      |              |        |      |             |        |          |      |      |      |
|               |                   | Selection of Consultant   |      |              |        |      |             |        |          |      |      |      |
| Segment       | ד = T<br>1 : זר   | Detailed Design   |      |              |        |      |             |        |          |      |      |      |
| ulviaing type |                   | ROW Acquisition   |      |              |        |      |             |        |          |      |      |      |
|               | 8əS               | Selection of Contractor   |      |              |        |      | <b>.</b> '' |        |          |      |      |      |
|               | аяр               | Construction  |      |              |        |      |             |        |          |      |      |      |
|               | )                 | Turnover of Facility to the Project Proponent   |      |              |        |      |             |        | •        |      |      |      |
|               |                   | O & M by Selected Project Proponent   |      |              |        |      |             |        |          |      |      |      |
|               |                   | Feasibility Study (WB T.A.)   |      |              |        |      |             |        |          |      |      |      |
|               |                   | Project Proposal by DPWH to NEDA  |      |              |        |      |             |        |          |      |      |      |
|               | roit              | NEDA Board Approval   |      | <b>•</b> ••  |        |      |             |        |          |      |      |      |
|               | Sec               | ROW Acquisition   |      |              |        | ľ    |             |        |          |      |      |      |
|               | )<br>Side         | Preparation of PQ/Tender Documents including<br>Draft TCA reflecting PPP Scheme: Segment Dividing |      |              |        |      |             |        |          |      |      |      |
|               |                   | Туре  |      |              |        |      |             |        |          |      |      |      |
|               |                   | Selection of Project Proponent  |      |              |        |      |             |        |          |      |      |      |
|               | 1 : tr<br>2 =     | Toll Concession Agreement (TCA)   |      |              |        |      |             |        |          |      |      |      |
|               |                   | NEDA Board Approval of TCA  |      |              |        |      |             |        |          |      |      |      |
|               | gəS               | Detailed Design   |      |              |        |      | _           |        |          |      |      |      |
|               | əte               | Financial Closure   |      |              |        |      | <b>"</b>    |        |          |      |      |      |
|               | sviv <sup>e</sup> | Construction  |      |              |        |      |             |        | <b>,</b> |      |      |      |
|               | 1                 | Toll Operation Certificate by TRB   |      |              |        |      |             |        | ••••     |      |      |      |
|               |                   | Operation and Maintenance   |      |              |        |      |             |        | -        |      |      |      |

TABLE 10.3-1 PROPOSED IMPLEMENTATION SCHEDULE: CALA EXPRESSWAY

| TABL                           | <b>TABLE 10.3-2</b> | 2 PROPOSED IMPLEMENTATION SCHEDULE: NAIA EXPRESSWAY (PHASE-II) | DULE: NA  | IA EX | <b>KPRESSV</b> | VAY (I | HASE-]    | [])      |      |
|--------------------------------|---------------------|--|-----------|-------|----------------|--------|-----------|----------|------|
| Project                        | Segment             | Activities   | 2010 2011 | 2012  | 2013 2014      | 4 2015 | 2016 2017 | 017 2018 | 2019 |
| NAIA Expressway                |                     | Preparatory Study  |           |       |                |        |           |          |      |
| Phase II                       |                     | Project Proposal by DPWH to NEDA                               |           |       |                |        |           |          |      |
|                                |                     | NEDA Board Approval  | ••••      |       |                |        |           |          |      |
| [Proposed                      |                     | Request to ODA Loan  |           |       |                |        |           |          |      |
| PPP Modality]                  |                     | Appraisal of the Project by ODA Agency                         |           |       |                |        |           |          |      |
| Tvpe-2:                        |                     | Pledge, E/N, L/A   |           |       |                |        |           |          |      |
|                                | 1                   | ROW Acquisition  |           |       | ·····          |        |           |          |      |
| BOT with                       | (ພ <b>ຸ</b><br>ເມລະ | Finalization of PQ/Tender Documents including                  |           |       |                |        |           |          |      |
| Government                     | 6' <br>ມິສີສ        | Draft Toll Concession Agreement                                |           |       |                |        |           |          |      |
| Uptront Subsidy/<br>Government | ר= ל<br>אין ציי     | Selection of Project Proponent                                 |           |       |                |        |           |          |      |
| Financial Support              | ∀<br>)              | Toll Concession Agreement (TCA)                                |           |       |                |        |           |          |      |
| -                              |                     | NEDA Board Approval of TCA                                     |           |       | •••••          |        |           |          |      |
|                                |                     | Detailed Design  |           |       |                |        |           |          |      |
|                                |                     | Financial Closure  |           |       |                |        |           |          |      |
|                                |                     | Construction   |           |       |                |        |           |          |      |
|                                |                     | Toll Operation Certificate by TRB                              |           |       |                |        | •         |          |      |
|                                |                     | Operation and Maintenance                                      |           |       |                |        |           | _        |      |
| Source: IICA Study Team        |                     |  |           |       |                |        |           |          |      |

|                          | TABI         | TABLE 10.3-3 PROPOSED IMPLEMENTATION SCHEDULE: CLEX PHASE-1                         | N SCI | <b>HEDU</b>    | LE: | CLEX     | PHASE     | -1       |      |        |      |
|--------------------------|--------------|---|-------|----------------|-----|----------|-----------|----------|------|--------|------|
| Project                  | Segment      | Activities  | 2010  | 2010 2011 2012 |     | 2013 20  | 2014 2015 | 2016     | 2017 | 2018 2 | 2019 |
| <b>Central Luzon</b>     |              | Preparatory Study   |       |                |     |          |           |          |      |        |      |
| Expressway               |              | Project Proposal by DPWH to NEDA  |       |                |     |          |           |          |      |        |      |
|                          |              | NEDA Board Approval   |       | <b>-</b>       |     |          |           |          |      |        |      |
|                          |              | Request to ODA Loan   |       | •••            |     |          |           |          |      |        |      |
| [Proposed                |              | Appraisal of the Project by ODA Agency  |       |                |     |          |           |          |      |        |      |
|                          |              | Pledge, E/N, L/A  |       |                |     |          |           |          |      |        |      |
| Type-5:                  | uc           | Selection of Consultant   |       |                |     |          |           |          |      |        |      |
|                          |              | Detailed Design   |       |                |     |          |           |          |      |        |      |
| rease i ype              |              | ROW Acquisition   |       |                |     |          |           |          |      |        |      |
|                          | 8Z =<br>Əsey | Selection of Contractor   |       |                |     | <b>.</b> |           |          |      |        |      |
|                          |              | Construction  |       |                |     |          |           |          |      |        |      |
|                          | 1            | Preparation of PQ/Tender Documents and Draft<br>Toll Operation Agreement for O & M. |       |                |     |          |           |          |      |        |      |
|                          |              | Selection of Project Proponent ( O & M Company)                                     |       |                |     |          |           |          |      |        |      |
|                          |              | Toll Concession Agreement (TCA)   |       |                |     |          |           |          |      |        |      |
|                          |              | NEDA Board Approval of TCA  |       |                |     |          |           |          |      |        |      |
|                          |              | Toll Operation Certificate by TRB   |       |                |     |          |           | <b>Č</b> |      |        |      |
|                          |              | Operation and Maintenance   |       |                |     |          |           |          |      |        |      |
| Courses IICA Church Toom |              |   |       |                |     |          |           |          |      |        |      |

# **CHAPTER 11**

# NEEDS ASSESSMENT OF TECHNICAL SUPPORT AND PROPOSED TECHNICAL SUPPORT PROGRAMS

# CHAPTER 11 NEEDS ASSESSMENT OF TECHNICAL SUPPORT AND PROPOSED TECHNICAL SUPPORT PROGRAMS

### 1.1 PILOT TRAINING

#### **1.1.1 Objectives of the Pilot Training**

Historically, planning and implementation of BOT projects was led by the private sector's initiative. DPWH has only two (2) experiences of PPP projects, which are STAR project and TPLEx project. The new administration is quite keen on promotion of PPP projects. One of the key issues of successful planning and implementation of PPP projects is the capacity development of the DPWH staff.

The Pilot Training of PPP Projects was undertaken under this study and the objectives of the pilot training were as follows;

#### **OBJECTIVES OF THE PILOT TRAINING**

- To assess the present level of DPWH staff's and other concerned agencies' capacity for PPP projects.
- To identify the weak fields/areas in the PPP project cycle.
- To recommend practical and efficient ways of capacity development and technical support program.

#### **11.1.2** Outline of the Pilot Training

#### 1) Participants

Staff of DPWH and other concerned agencies were invited to attend the pilot training as follows;

|                      | JIIANIS             |
|----------------------|---------------------|
| Agency               | No. of Participants |
| DPWH                 | <u>21</u>           |
| • PMO-BOT            | 7                   |
| • PMO-FS             | 4                   |
| Planning Service     | 4                   |
| • PMO-IROW           | 2                   |
| PMO-ESSO             | 2                   |
| Legal Service        | 1                   |
| Office of Usec. Asis | 1                   |
| DOTC                 | <u>2</u>            |
| NEDA                 | <u>2</u>            |
| DOF                  | <u>3</u>            |
| TRB                  | <u>2</u>            |
| PPP Center           | <u>2</u>            |
| DA                   | <u>1</u>            |
| Total                | 33                  |

PARTICIPANTS

Note: Number of participants includes partial attendance.

# 2) Program

Pilot Training program is shown in **Table 11.1.2-1**. Pilot training program was designed to cover all project cycle of PPP projects. Pilot training materials are presented in a separate volume titled "Pilot Training Materials".

|                               |   | Session I : (1:00 - 3:30 PM)   | Session II : (3:45 - 6:15 PM)                                 |
|-------------------------------|---|--|---|
| <sup>10</sup> / <sub>19</sub> | Т | Initial Capacity Assessment  | • PPP in General  |
| 20                            | W | • PPP in the Philippines   | Legal Framework/Institutional<br>Framework                    |
| 21                            | Т | Project Identification   | Business Case/Feasibility Study<br>(General Procedure)        |
| 22                            | F | Traffic Demand Forecast     Attracted to Tollways  | Risk and Risk Allocation                                      |
| 23                            | S |  |   |
| 24                            | S |  |   |
| 25                            | М | (Barangay  | Election)   |
| 26                            | Т | Financial Analysis   | Financial Analysis  |
| 27                            | W | Project Procurement  | Project Implementation  |
| 28                            | Т | Operation & Maintenance  | Project Monitoring and Post-<br>Evaluation of Impact          |
| 29                            | F | <ul> <li>Assessment of Pilot Training</li> <li>Open Forum</li> <li>What to be trained more?</li> </ul> | <ul><li>Open Forum</li><li>What to be trained more?</li></ul> |

### Table 11.1.2-1 PILOT TRAINING PROGRAM

#### 3) Trainors

Aside from the Study Team members, trainors were invited from the private sector as follows;

- Engr. Teodoro T. Encarnacion, former Undersecretary of DPWH.
- Atty. Saviniano M. Perez, Jr.
- Members of Manila North Tollways Corp. (MNTC)

#### 11.1.3 Initial Capacity Assessment

In order to assess the present level of knowledge of participants, a questionnaire on initial capacity assessment which comprised of 18 items and 52 sub-items (refer to **Annex 11.1-1**) was distributed to the participants on the first day of the pilot training. Knowledge levels were classified as follows:

- 1. Know very well.
- 2. Know some.
- 3. Do not know.

Knowledge levels of above three categories are shown in **Figure 11.1.3-1.** Knowledge levels of 1 (Know very well), and 2 (Know some) are shown in **Figure 11.1.3-2.** Knowledge level of 3 (Do not know) is presented in **Figure 11.1.3-3.** 

It can be concluded as follows:

- Most participants have general ideas/principles of PPP projects, although knowledge level is not sufficient yet.
- Items or area/fields of knowledge of which capacity needs to be strengthened or over 40% of participants answered "Do not know" are as follows (in the order of least knowledge);
  - Q6 : Tollway Planning and Design
  - Q12 : Financial Evaluation
  - Q15 : Project Implementation
  - Q14 : Project Procurement
  - Q8 : EIA and Resettlement Plan
  - Q7 : Traffic Demand Forecast
  - Q16 : Operation and Maintenance
  - Q5 : Business Case/Feasibility Study

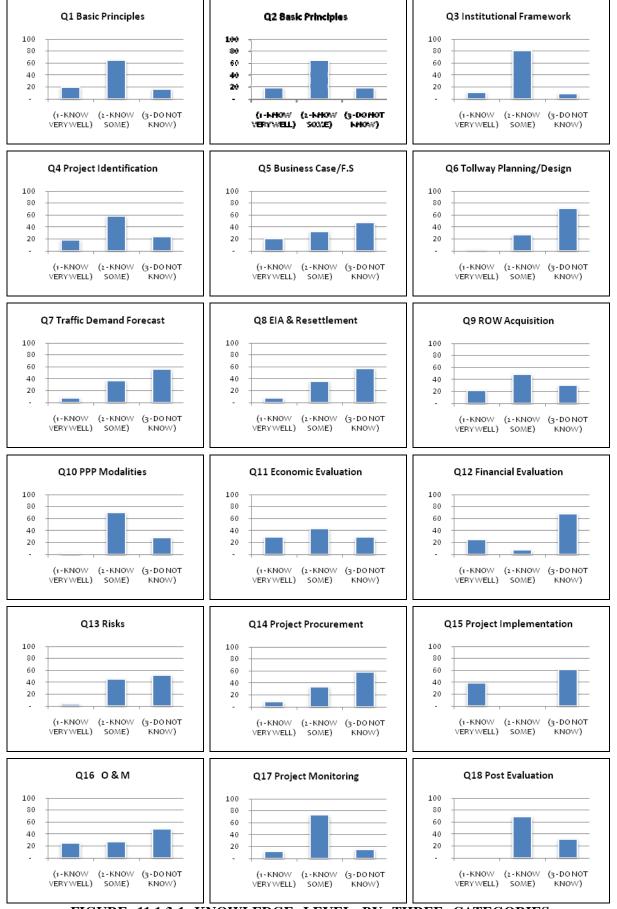
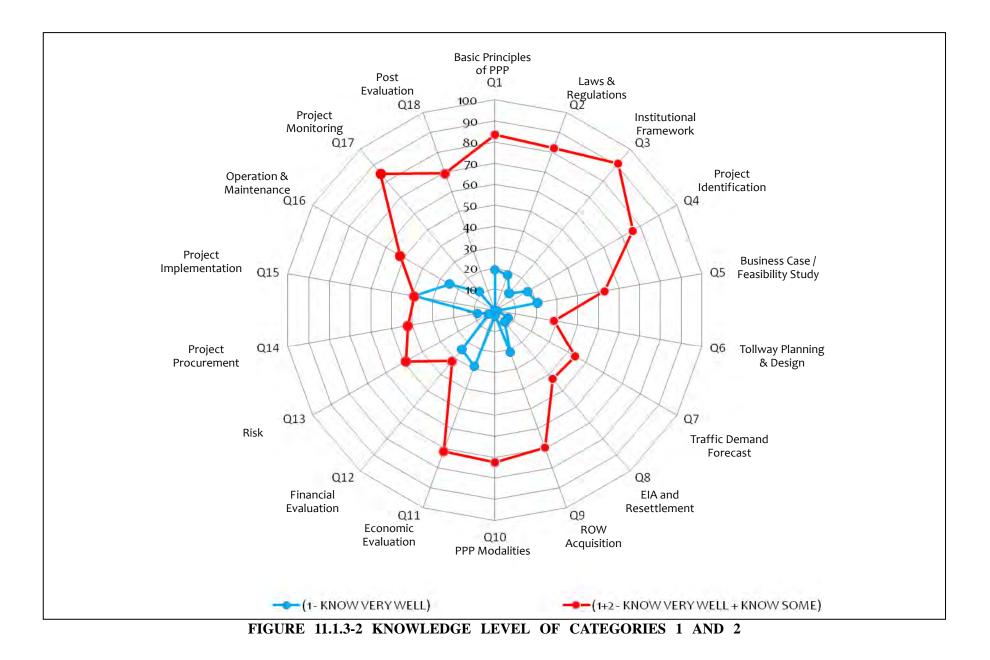


FIGURE 11.1.3-1 KNOWLEDGE LEVEL BY THREE CATEGORIES



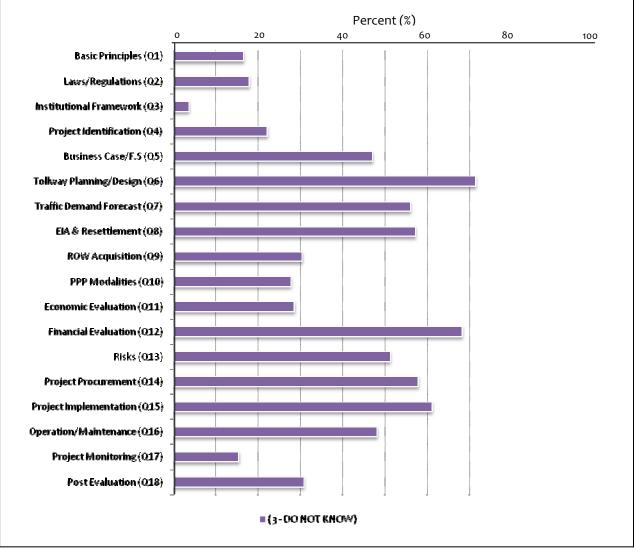


FIGURE 11.1.3-3 KNOWLEDGE LEVEL OF CATEGORY 3

# 11.1.4 Opinions/Suggestions for PPP Capacity Development

On the last day of the Pilot Training, questionnaire on opinions/suggestions for PPP capacity development was distributed to identify a) what do they need to know more? and b) any opinions/suggestions for the next step training course. Questionnaire is shown in **Annex 11.1-2.** In the questionnaire, limited topics were asked if they want to know more, and the results are summarized in **Table 11.1.4-1.** Any other needs and opinions/suggestions were requested to write down in the questionnaire, which are presented in **Annex 11.1-3**, as summarized in **Table 11.1.4-2**.

| 1.       Basic Principles of PPP       • Experiences of other countries should be presented, particularly success/failed cases.         2.       Laws and Regulations       • More legal issues should be discussed.         3.       Institutional Framework       • More detailed functions of various government agencies should be discussed.         4.       Project Identification       • Case study should be exercised.         5.       Business Case/Feasibility Study       • Case study should be exercised.         6.       Tollway Planning and Design       • International best practice, developing trends and technologies, sample design and specifications, value engineering, etc. should be presented and practical training should be undertaken.         7.       Traffic Demand Forecast       • Hands-on training should be undertaken by using JICA-STRADA software.         8.       EIA and Resettlement Plan       • Workshop in EIA and Resettlement Plan should be undertaken.         9.       ROW Acquisition       • DPWH ROW Manual should be unduetd.         10.       Economic Evaluation       • Hands-on computation on economic evaluation should be done.         11.       Financial Evaluation       • Hands-on computation should be done.         12.       Risk, Risk Management, Risk Anlocation       • Elailed discussed on various appropriate to each type of PPP modality should be discussed and prepared.         13.       Project Procurement       • Special pr  |     | Subjects                | ONS/SUGGESTIONS FOR NEXT STEP TRAINING<br>Opinions and Suggestions           |
|--|-----|-------------------------|--|
| 2. Laws and Regulations         Particularly success/failed cases.           2. Laws and Regulations         • More legal issues should be discussed.           9. Roblems or issues of existing laws should be discussed.         • Interpretation of legal issues should be discussed.           3. Institutional Framework         • More detailed functions of various government agencies should be discussed.           4. Project Identification         • Case study should be exercised.           5. Business Case/Feasibility Study         • Case study should be exercised.           6. Tollway Planning and Design         • International best practice, developing trends and technologies, sample design and specifications, value engineering, etc. should be undertaken by using JICA-STRADA software.           7. Traffic Demand Forecast         • Hands-on training should be undertaken by using JICA-STRADA software.           8. EIA and Resettlement Plan         • Workshop in EIA and Resettlement Plan should be undertaken.           9. ROW Acquisition         • PPWH ROW Manual should be undertaken.           10. Economic Evaluation         • Hands-on computation on economic evaluation should be done.           11. Financial Evaluation         • Hands-on computation on low to quantify risks and how to be incorporated in cost estimate should be done.           12. Risk, Risk Management, Risk Allocation         • Bataled discussion on how to quantify risks and how to be incorporated in cost estimate should be done.           13. Project Procurement         <  | 1.  | Basic Principles of PPP | • Experiences of other countries should be presented.                        |
| <ul> <li>Problems or issues of existing laws should be discussed.<br/>Interpretation of legal issues should be discussed.</li> <li>More detailed functions of various government agencies should be discussed.</li> <li>Project Identification</li> <li>Case study should be exercised.</li> <li>Business Case/Feasibility Study</li> <li>Case study should be exercised.</li> <li>Tollway Planning and Design</li> <li>International best practice, developing trends and technologies, sample design and specifications, value engineering, etc. should be presented and practical training should be undertaken.</li> <li>Traffic Demand Forecast</li> <li>Hands-on training should be undertaken by using JICA-STRADA software.</li> <li>E1A and Resettlement Plan</li> <li>Workshop in E1A and Resettlement Plan should be undertaken.</li> <li>DPWH ROW Manual should be updated.</li> <li>Legal advisers/judges should be invited to discuss ROW acquisition problems.</li> <li>Economic Evaluation</li> <li>Hands-on computation on economic evaluation should be done.</li> <li>Presentation of financial models of various PPP modalities should be inxited done.</li> <li>Risk Risk Management, Risk analysis software should be incost estimate should be done.</li> <li>Risk Allocation</li> <li>Standardized contract provisions appropriate to each type of PPP modality should be discussed.</li> <li>Steial project management techniques should be presented.</li> <li>Standard O &amp; M Manual should be presented.</li> <li>Standard O &amp; M Manual should be presented.</li> <li>Standard O &amp; M Manual should be discussed.</li> <li>Torbetter and Practical Training</li> <li>A thorough project management techniques should be presented.</li> <li>Standard O &amp; M Manual should be presented.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Special project management techniques should be discussed.</li> <li>Site visits.</li> <li>Experi</li></ul> |     |                         |  |
| Interpretation of legal issues should be discussed.     More detailed functions of various government agencies should be discussed.     Project Identification     Case study should be exercised.     Case study should be exercised.     International best practice, developing trends and technologies, sample design and specifications, value engineering, etc. should be presented and practical training should be undertaken.     Taffic Demand Forecast     Hands-on training should be undertaken by using JICA-STRADA software.     EIA and Resettlement     Plan     Undertaken.     DPWH ROW Manual should be undertaken by using JICA-STRADA software.     EConomic Evaluation     DPWH ROW Manual should be underta.     Presentation or computation on economic evaluation should be undertaken.     Presentation of financial models of various PPP modalities should be discussed.     Skik Adlocation     Risk Allocation     Risk Allocation     Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.     Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.     Standard O & M Manual should be presented.     Standard O & M Manuals should be presented.     Standard O & M Manuals should be prepared.     A thorough project management techniques should be prepared.     Standard O & M Manuals should be presented.     Standard O & M Manuals should be presented.     Standard O & M Manuals should be exercised.     Prose training     Standard O & M Manuals should be exercised.     Presented on a more practicum OTT trainings.     PPP Handbook preparation.     Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.  | 2.  | Laws and Regulations    | More legal issues should be discussed.                                       |
| 3.       Institutional Framework       • More detailed functions of various government agencies should be discussed.         4.       Project Identification       • Case study should be exercised.         5.       Business Case/Feasibility Study       • Case study should be exercised.         6.       Tollway Planning and Design       • International best practice, developing trends and technologies, sample design and specifications, value engineering, etc. should be presented and practical training should be undertaken.         7.       Traffic Demand Forecast       • Hands-on training should be undertaken by using JICA-STRADA software.         8.       EIA and Resettlement Plan       • Workshop in EIA and Resettlement Plan should be undertaken.         9.       ROW Acquisition       • DPWH ROW Manual should be updated.         10.       Economic Evaluation       • Hands-on computation on economic evaluation should be done.         11.       Financial Evaluation       • Hands-on computation on economic evaluation should be done.         12.       Risk, Risk Management, Risk Allocation       • Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.         13.       Project Implementation       • Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         14.       Project Implementation       • Standard O & M Manuals should be presented.         15.  |     | -                       | <ul> <li>Problems or issues of existing laws should be discussed.</li> </ul> |
| should be discussed.       Source         4. Project Identification       Case study should be exercised.         5. Business Case/Feasibility<br>Study       Case study should be exercised.         6. Tollway Planning and<br>Design       International best practice, developing trends and<br>technologies, sample design and specifications, value<br>engineering, etc. should be presented and practical training<br>should be undertaken.         7. Traffic Demand Forecast       Hands-on training should be undertaken by using<br>JICA-STRADA software.         8. EIA and Resettlement<br>Plan       Workshop in EIA and Resettlement Plan should be<br>undertaken.         9. ROW Acquisition       DPWH ROW Manual should be updated.         10. Economic Evaluation       Hands-on computation on economic evaluation should be<br>done.         11. Financial Evaluation       Hands-on computation should be done.         12. Risk, Risk Management,<br>Risk Allocation       Detailed discussion on how to quantify risks and how to be<br>incorporated in cost estimate should be done.         13. Project Procurement       Standardized contract provisions appropriate to each type of<br>PPP modality should be discussed and prepared.         14. Project Implementation       Standard O & M Manuals should be presented.         15. Operation and<br>Maintenance       A thorough project monitoring and procedures should be<br>prepared.         16. Project Implementation       Standard O & M Manuals should be presented.         16. Project Monitoring and<br>Post Evaluation   |     |                         | • Interpretation of legal issues should be discussed.                        |
| 5.       Business Case/Feasibility<br>Study       • Case study should be exercised.         6.       Tollway Planning and<br>Design       • International best practice, developing trends and<br>technologies, sample design and specifications, value<br>engineering, etc. should be presented and practical training<br>should be undertaken.         7.       Traffic Demand Forecast       • Hands-on training should be undertaken by using<br>JICA-STRADA software.         8.       EIA and Resettlement<br>Plan       • Workshop in EIA and Resettlement Plan should be<br>undertaken.         9.       ROW Acquisition       • DPWH ROW Manual should be updated.         10.       Legal advisers/judges should be done.         11.       Financial Evaluation       • Hands-on computation on economic evaluation should be<br>done.         12.       Risk, Risk Management,<br>Risk Allocation       • Detailed discussion on how to quantify risks and how to be<br>incorporated in cost estimate should be done.         13.       Project Procurement       • Standardized contract provisions appropriate to each type of<br>PPP modality should be discussed and prepared.         14.       Project Implementation       • Standard O & M Manuals should be presented.         15.       Operation and<br>Maintenance       • Standard O & M Manuals should be presented.         16.       Project Monitoring and<br>Post Evaluation       • A thorough project should be exercised.         17.       For Better and Practical<br>Training       • A thoroug  | 3.  | Institutional Framework |  |
| Study       • International best practice, developing trends and technologies, sample design and specifications, value engineering, etc. should be presented and practical training should be undertaken.         7. Traffic Demand Forecast       • Hands-on training should be undertaken by using JICA-STRADA software.         8. ELA and Resettlement Plan       • Workshop in EIA and Resettlement Plan should be undertaken.         9. ROW Acquisition       • DPWH ROW Manual should be updated.         10. Economic Evaluation       • Hands-on computation on economic evaluation should be done.         11. Financial Evaluation       • Hands-on computation should be done.         12. Risk, Risk Management, Risk Allocation should be practiced.       • Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be introduced.         13. Project Procurement       • Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         14. Project Implementation       • Standard O & M Manuals should be presented.         15. Operation and Maintenance       • A thorough project monitoring and post evaluation should be discussed.         17. For Better and Practical Training       • A thorough project should be exercised.         17. For Better and Practical Training       • Stendardized training on specific PPP topics.         18. Project Monitoring and Post evaluation       • Stendardized training on specific PPP topics.         17. For Better and Practical Training  | 4.  | Project Identification  | • Case study should be exercised.  |
| Design       technologies, sample design and specifications, value engineering, etc. should be presented and practical training should be undertaken.         7. Traffic Demand Forecast       Hands-on training should be undertaken by using JICA-STRADA software.         8. EIA and Resettlement Plan       Workshop in EIA and Resettlement Plan should be undertaken.         9. ROW Acquisition       DPWH ROW Manual should be updated.         10. Economic Evaluation       Legal advisers/judges should be invited to discuss ROW acquisition problems.         10. Economic Evaluation       Hands-on computation on economic evaluation should be done.         11. Financial Evaluation       Hands-on computation should be done.         12. Risk, Risk Management, Risk Allocation       Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.         13. Project Procurement       Special project management techniques should be prepared.         14. Project Implementation       Standard O & M Manuals should be prepared.         15. Operation and Maintenance       A thorough project monitoring and procedures should be prepared.         16. Project Monitoring and Post Evaluation       A thorough project monitoring and prost evaluation should be discussed.         17. For Better and Practical Training       Past and present PPP projects should be discussed.         17. For Better and Practical Training       Past and present PPP project should be discussed.         17. For Bet  | 5.  |                         | Case study should be exercised.  |
| engineering, etc. should be presented and practical training should be undertaken.         7. Traffic Demand Forecast       Hands-on training should be undertaken by using JICA-STRADA software.         8. EIA and Resettlement Plan       Workshop in EIA and Resettlement Plan should be undertaken.         9. ROW Acquisition       DPWH ROW Manual should be updated.         10. Economic Evaluation       Legal advisers/judges should be invited to discuss ROW acquisition problems.         10. Economic Evaluation       Hands-on computation on economic evaluation should be done.         11. Financial Evaluation       Hands-on computation should be done.         12. Risk, Risk Management, Risk Allocation       Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.         13. Project Procurement       Special project management techniques should be prepared.         14. Project Implementation       Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         15. Operation and Maintenance       Standard O & M Manuals should be presented.         16. Project Monitoring and Post Evaluation       A thorough project monitoring and post evaluation should be done.         17. For Better and Practical Training       Past and present PPP project should be discussed.         17. For Better and Practical Training       Past and present PPP project should be discussed.         17. For Better and Practical Training       <  | 6.  | Tollway Planning and    | International best practice, developing trends and                           |
| should be undertaken.         7. Traffic Demand Forecast       • Hands-on training should be undertaken by using JICA-STRADA software.         8. EIA and Resettlement Plan       • Workshop in EIA and Resettlement Plan should be undertaken.         9. ROW Acquisition       • DPWH ROW Manual should be updated.         10. Economic Evaluation       • Hands-on computation on economic evaluation should be done.         11. Financial Evaluation       • Hands-on computation on economic evaluation should be done.         12. Risk, Risk Management, Risk Allocation       • Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.         13. Project Procurement       • Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         14. Project Implementation       • Standard O & M Manuals should be presented.         15. Operation and Maintenance       • Athorough project management techniques should be presented.         16. Project Monitoring and Post Evaluation       • Athorough project should be discussed.         17. For Better and Practical Training       • Past and present PPP projects should be discussed.         17. For Better and Practical Training       • Past and present PPP projects should be discussed.         18. Project Monitoring and Post Evaluation       • Case study of completed project should be discussed.         17. For Better and Practical Training       • Past and present PPP projects shou  |     | Design                  |  |
| 8. EIA and Resettlement<br>Plan       • Workshop in EIA and Resettlement Plan should be<br>undertaken.         9. ROW Acquisition       • DPWH ROW Manual should be updated.         10. Economic Evaluation       • Hands-on computation on economic evaluation should be<br>done.         11. Financial Evaluation       • Hands-on computation should be done.         12. Risk, Risk Management,<br>Risk Allocation       • Detailed discussion on how to quantify risks and how to be<br>incorporated in cost estimate should be done.         13. Project Procurement       • Standardized contract provisions appropriate to each type of<br>PPP modality should be discussed and prepared.         14. Project Implementation       • Standardized contract provisions appropriate to each type of<br>PPP modality should be discussed and prepared.         15. Operation and<br>Maintenance       • Standard & & Manual should be prepared.         16. Project Monitoring and<br>Post Evaluation       • A thorough project monitoring and post evaluation should be<br>discussed.         17. For Better and Practical<br>Training       • Past and present PPP project should be discussed.         • Site supervisite.       • Specialized training on specific PPP topics.         • Hands-on and more practicum OJT trainings.       • PPP Handbook prepared.         • Five courses (Technical, Financial, Marketing, Legal and<br>Planning) to be prepared.  |     |                         | should be undertaken.  |
| Plan       undertaken.         9. ROW Acquisition       DPWH ROW Manual should be updated.         10. Economic Evaluation       Legal advisers/judges should be invited to discuss ROW acquisition problems.         10. Economic Evaluation       Hands-on computation on economic evaluation should be done.         11. Financial Evaluation       Hands-on computation should be done.         12. Risk, Risk Management, Risk Allocation       Presentation of financial models of various PPP modalities should be practiced.         13. Project Procurement       Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         14. Project Implementation       Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         15. Operation and Maintenance       Standard 0 & M Manuals should be prepared.         16. Project Monitoring and Post Evaluation       A thorough project monitoring and post evaluation should be discussed.         17. For Better and Practical Training       Past and present PPP project should be discussed.         17. For Better and Practical Training       Past and present PP project should be discussed.         18. Ste visits.       Experience share with private companies.         19. Specialized training on specific PPP topics.       Hands-on and more practicum OIT trainings.         10. For better and Practical Training       Fiter couruses (Technical, Financial, Marketing, Legal an   | 7.  | Traffic Demand Forecast |  |
| <ul> <li>Legal advisers/judges should be invited to discuss ROW acquisition problems.</li> <li>Economic Evaluation</li> <li>Hands-on computation on economic evaluation should be done.</li> <li>Hands-on computation should be done.</li> <li>Hands-on computation should be done.</li> <li>Presentation of financial models of various PPP modalities should be practiced.</li> <li>Risk, Risk Management, Risk Allocation</li> <li>Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.</li> <li>Risk analysis software should be introduced.</li> <li>Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.</li> <li>Special project management techniques should be presented.</li> <li>Site supervision guidelines and procedures should be presented.</li> <li>Site supervision guidelines and procedures should be discussed.</li> <li>Case study of completed project should be exercised.</li> <li>For Better and Practical Training</li> <li>Past and present PPP projects should be discussed.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparedion.</li> </ul>   | 8.  |                         | 1  |
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| 10. Economic Evaluation       • Hands-on computation on economic evaluation should be done.         11. Financial Evaluation       • Hands-on computation should be done.         11. Financial Evaluation       • Hands-on computation should be done.         12. Risk, Risk Management, Risk Allocation       • Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.         13. Project Procurement       • Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.         14. Project Implementation       • Special project management techniques should be presented.         15. Operation and Maintenance       • Standard O & M Manuals should be prepared.         16. Project Monitoring and Post Evaluation       • A thorough project monitoring and post evaluation should be discussed.         17. For Better and Practical Training       • Past and present PPP projects should be discussed.         17. For Better and Practical Training       • Past and present PPP project should be discussed.         18. Pereince share with private companies.       • Specialized training on specific PPP topics.         17. For Better and Practical Training       • Past and present PPP projects should be discussed.         18. Project Procurement       • Past and present PPP projects should be discussed.         19. For better and Practical Training       • Past and present PPP projects should be discussed.         10. Five courses (Tech  |     |                         | <ul> <li>Legal advisers/judges should be invited to discuss ROW</li> </ul>   |
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| <ul> <li>Presentation of financial models of various PPP modalities should be practiced.</li> <li>Risk, Risk Management, Risk Allocation</li> <li>Detailed discussion on how to quantify risks and how to be incorporated in cost estimate should be done.</li> <li>Risk analysis software should be introduced.</li> <li>Project Procurement</li> <li>Standardized contract provisions appropriate to each type of PPP modality should be discussed and prepared.</li> <li>Project Implementation</li> <li>Special project management techniques should be presented.</li> <li>Site supervision guidelines and procedures should be prepared.</li> <li>Operation and Maintenance</li> <li>Standard O &amp; M Manuals should be prepared.</li> <li>Standard O &amp; M Should be prepared.</li> <li>A thorough project monitoring and post evaluation should be discussed.</li> <li>Case study of completed project should be discussed.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.</li> </ul>  | 10. | Economic Evaluation     | •  |
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| <ul> <li>Risk analysis software should be introduced.</li> <li>13. Project Procurement</li> <li>Standardized contract provisions appropriate to each type of<br/>PPP modality should be discussed and prepared.</li> <li>Special project management techniques should be presented.</li> <li>Site supervision guidelines and procedures should be<br/>prepared.</li> <li>15. Operation and<br/>Maintenance</li> <li>Standard O &amp; M Manuals should be prepared.</li> <li>Standard O &amp; M should be presented.</li> <li>Project Monitoring and<br/>Post Evaluation</li> <li>Case study of completed project should be exercised.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook prepared.</li> </ul>   | 12. |                         |  |
| 13. Project Procurement• Standardized contract provisions appropriate to each type of<br>PPP modality should be discussed and prepared.14. Project Implementation• Special project management techniques should be presented.14. Project Implementation• Special project management techniques should be presented.15. Operation and<br>Maintenance• Standard O & M Manuals should be prepared.16. Project Monitoring and<br>Post Evaluation• A thorough project monitoring and post evaluation should be<br>discussed.17. For Better and Practical<br>Training• Past and present PPP projects should be discussed.18. Site visits.• Experience share with private companies.<br>Specialized training on specific PPP topics.19. Hands-on and more practicum OJT trainings.• PPP Handbook preparation.<br>• Five courses (Technical, Financial, Marketing, Legal and<br>Planning) to be prepared.  |     | Risk Allocation         | -  |
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| <ul> <li>15. Operation and<br/>Maintenance</li> <li>Standard O &amp; M Manuals should be prepared.</li> <li>How to estimate O &amp; M should be presented.</li> <li>16. Project Monitoring and<br/>Post Evaluation</li> <li>A thorough project monitoring and post evaluation should be<br/>discussed.</li> <li>Case study of completed project should be exercised.</li> <li>Past and present PPP projects should be discussed.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and<br/>Planning) to be prepared.</li> </ul>   | 14. | Project Implementation  |  |
| MaintenanceHow to estimate O & M should be presented.16. Project Monitoring and<br>Post Evaluation• A thorough project monitoring and post evaluation should be<br>discussed.<br>• Case study of completed project should be exercised.17. For Better and Practical<br>Training• Past and present PPP projects should be discussed.<br>• Site visits.<br>• Experience share with private companies.<br>• Specialized training on specific PPP topics.<br>• Hands-on and more practicum OJT trainings.<br>• PPP Handbook preparation.<br>• Five courses (Technical, Financial, Marketing, Legal and<br>Planning) to be prepared.  |     |                         | prepared.  |
| <ul> <li>16. Project Monitoring and<br/>Post Evaluation</li> <li>A thorough project monitoring and post evaluation should be<br/>discussed.</li> <li>Case study of completed project should be exercised.</li> <li>17. For Better and Practical<br/>Training</li> <li>Past and present PPP projects should be discussed.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and<br/>Planning) to be prepared.</li> </ul>   | 15. |                         | • Standard O & M Manuals should be prepared.                                 |
| Post Evaluationdiscussed.17. For Better and Practical<br>Training• Past and present PPP projects should be discussed.17. For Better and Practical<br>Training• Past and present PPP projects should be discussed.• Site visits.<br>• Experience share with private companies.<br>• Specialized training on specific PPP topics.<br>• Hands-on and more practicum OJT trainings.<br>• PPP Handbook preparation.<br>• Five courses (Technical, Financial, Marketing, Legal and<br>Planning) to be prepared.  |     |                         |  |
| <ul> <li>17. For Better and Practical<br/>Training</li> <li>Past and present PPP projects should be discussed.</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and<br/>Planning) to be prepared.</li> </ul>   | 16. |                         |  |
| <ul> <li>Training</li> <li>Site visits.</li> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.</li> </ul>  |     |                         |  |
| <ul> <li>Experience share with private companies.</li> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.</li> </ul>  | 17. |                         | 1 1 5  |
| <ul> <li>Specialized training on specific PPP topics.</li> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.</li> </ul>  | 1   | Training                |  |
| <ul> <li>Hands-on and more practicum OJT trainings.</li> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.</li> </ul>  | 1   |                         |  |
| <ul> <li>PPP Handbook preparation.</li> <li>Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.</li> </ul>  |     |                         |  |
| • Five courses (Technical, Financial, Marketing, Legal and Planning) to be prepared.   |     |                         |  |
| Planning) to be prepared.  |     |                         |  |
|  |     |                         |  |
| Group worksnop on case studies.  |     |                         | <ul> <li>Group workshop on case studies.</li> </ul>                          |

# TABLE 11.1.4-2 OPINIONS/SUGGESTIONS FOR NEXT STEP TRAINING

## 11.1.5 Study Team's Observation

Study Team's observation was as follows;

# 1) Participants

- Participants were invited from various sectors and also from various expertises.
- Participants have various levels of knowledge of PPP projects. Some have already a deep knowledge, but mostly do not have.
- Presentations were focused on expressway PPP projects, therefore, participants from other sectors seem to have difficulty in understanding.

### 2) Trainors

• Trainors were Study Team members and Filipino experts from the private sector. Filipino experts were welcomed by participants, since they presented their actual experiences in the Philippines.

### **3)** Contents of the Presentations

- Contents of the presentations were limited to general principles of PPP projects.
- Participants had obtained just an outline of PPP projects.

### 4) Training Schedule

• The Pilot training was undertaken in the afternoon of eight (8) consecutive weekdays, since many of the participants could not spend a one full day due to the pressing needs in their respective offices.

# 11.2 PROPOSED TECHNICAL SUPPORT PROGRAMS

#### **11.2.1** Needs of Further Capacity Development

As the results of the answers on the questionnaire on initial capacity assessment and on the opinions/suggestions for PPP capacity development, all participants wish to have further capacity development program. An advance course of capacity development should be implemented to strongly support promotion of PPP projects in the Philippines.

#### 11.2.2 Three Sets of Technical Supports

The Study Team believes that the following three (3) sets of technical supports are needed;

| Technical Support Program | Ι   | : | Management<br>trainors for<br>Training Cour | the   |         |        | U        |         |
|---------------------------|-----|---|---|-------|---------|--------|----------|---------|
| Technical Support Program | II  | : | Specialist Trai                             | ining |         |        |          |         |
| Technical Support Program | III | : | Preparation of                              | stand | ards, m | anuals | and guid | elines. |

# 11.2.3 Technical Support Program I : Management Staff Level Training

### 1) Target Staff

This program is intended to develop the capacity of management staff of PPP related offices, such as PMO-BOT, Planning Service, PMO-FS of DPWH. Management staff of other agencies may be invited such as NEDA, DOF, DOTC, TRB, and PPP Center.

### 2) Manner of Training

Manner of training should be focused on workshops regarding existing issues/problems, experiences of other countries and its applicability to the Philippines conditions, etc., thus active participation in the discussion will be achieved.

### **3**) Topics to be covered

The topics should cover all the processes of a PPP project cycle.

### 4) Trainors

In addition to the JICA Team members, local experts/specialists of DPWH as well as of the private sector should be selected as trainors.

### 5) Time of Training

Management staff are all busy, thus time of training needs to be after office hours, say from 5:30 pm to 7:30 pm and three (3) times a week.

# 6) Proposed Training Program

Proposed training program is shown in Table 11.2.3-1.

# 11.2.4 Technical Support Program II : Specialist Training

#### 1) Target Staff

Persons of respective expertise/field, for example, transport planner/traffic engineer for the topic of "Traffic Demand Forecast".

#### 2) Manner of Training

Hands-on practice should be basically adopted.

#### 3) Topics to be covered

Topics should be specifically selected. General matters of PPP should not be highlighted.

|            | Торіс                  |   | PROFOSED PROGRAM FOR PROGRA<br>Outline of Contents | Duration     |
|------------|------------------------|---|--|--------------|
| 1.         | Basic Principles of    | ٠ | Background and Objectives                          | 1 day        |
|            | PPP                    | • | PPP Modalities                                     | 2            |
|            |                        | • | Risk and Risk Allocation                           |              |
|            |                        | • | Experiences of other countries                     |              |
| 2.         | PPP in the Philippines | • | PPP projects in the Philippines                    | 1 day        |
|            |                        | • | Issues and Bottlenecks                             |              |
| 3.         | Laws and Regulations   | ٠ | Past and Present Legal Issues                      | 2 days       |
|            | C                      | • | Interpretations of Legal Issues                    | -            |
|            |                        | • | Direction of Amendments of Existing                |              |
|            |                        |   | Laws/Regulations                                   |              |
| 4.         | Institutional          | • | Existing Framework                                 | 1 day        |
|            | Framework              | • | Issues and Problems                                | -            |
|            |                        | • | For Better Framework                               |              |
| 5.         | Project Identification | • | Case Study   | 2 days       |
| 6.         | Business Case/         | • | Evaluation of Previous Study                       | 5 days       |
|            | Feasibility Study      |   |  |              |
| 7.         | Tollway Planning &     | • | Evaluation of previous planning and design         | 3 days       |
|            | Design                 |   | 8  |              |
| 8.         | Traffic Demand         | • | Procedure  | 3 days       |
| 0.         | Forecast               | • | Key Points of each procedure                       | 5 dujs       |
|            | 1 of coust             | • | How to judge forecast results                      |              |
| 9.         | EIA and Resettlement   | • | Evaluation of previous EIA and Resettlement        | 2 days       |
| <i>.</i>   |                        |   | Plan   | 2 duj 5      |
| 10.        | ROW Acquisition        | • | Example of ROW Acquisition                         | 2 days       |
| 10.        | no w nequilition       | • | Problem encountered                                | 2 duy 5      |
|            |                        | • | Improvement measures                               |              |
| 11         | PPP Modalities         | • | Examples of PPP modalities                         | 1 day        |
|            | 111 Wouldtie           | • | Applicable conditions                              | 1 duy        |
| 12         | Economic Evaluation    | • | Evaluation of previous studies                     | 2 days       |
|            | Financial Evaluation   | • | Basis of financial evaluation                      | 4 days       |
| 10.        |                        | • | Examples of financial evaluation                   |              |
|            |                        | • | Financial models adopted by previous projects      |              |
| 14         | Risks                  | • | Identification, management and allocation of       | 3 days       |
| 1          | <b>H</b> ORD           |   | risks  | 5 duj 5      |
|            |                        | • | Risks encountered by existing projects             |              |
|            |                        | • | How to incorporate risks in Toll Concession        |              |
|            |                        | - | Agreement  |              |
| 15         | Project Procurement    | • | Issues of previous procurements                    | 3 days       |
| 10.        | rojeet roeurement      | • | Legal matters discussed in the past                | Julys        |
|            |                        | • | Appropriate duration of each step of               |              |
|            |                        | - | Procurement  |              |
| 16         | Project                | • | Experiences of existing concessionaires            | 2 days       |
| 10.        | Implementation         |   | Experiences of existing concessionanes             | 2 aug 5      |
| 17         | Operation and          | • | Experiences of existing concessionaires            | 2 days       |
| 1/.        | Maintenance            | - | Experiences of existing concessionanes             | 2 days       |
| 18         | Project Monitoring     | • | Items and method of monitoring                     | 1 day        |
|            | Post Evaluation        | • | Items and method of post evaluation                | 1 day        |
| 19.<br>Tot |                        | • | terns and method of post evaluation                | Net 41 days  |
| 10         | urce: IICA Study Team  |   |  | Thet 41 days |

# TABLE 11.2.3-1 PROPOSED PROGRAM FOR PROGRAM I

# 4) Participants

Participants should be selected for each topic based on the participants' expertise, so there is no need for a participant to attend all the trainings.

### 5) Proposed Training Program

Proposed training program is presented in Table 11.2.4-1.

|    | TABLI                                  | E 11.2.4-1 PROPOSED PROGR   | RAM FOR PROGRAM  | Ι         |
|----|--|---|--|-----------|
|    | Торіс                                  | <b>Outline of Contents</b>  | Proposed Expertise   | Duration  |
| 1. | Project<br>Identification              | • Case Study of Inter-city<br>and Intra-city  | <ul> <li>Regional/Urban<br/>Planner</li> <li>Highway Planner</li> <li>Transport Planner</li> <li>Economist</li> </ul>                              | • 1 week  |
| 2. | Business Case/<br>Feasibility<br>Study | Evaluation of Previous<br>Studies   | <ul> <li>Highway<br/>Planner/Engineer</li> <li>Transport<br/>Planner/Traffic<br/>Engineer</li> <li>Economist</li> <li>Financial Analyst</li> </ul> | • 1 week  |
| 3. | Tollway<br>Planning and<br>Design      | <ul> <li>Review of Previous<br/>Plan/Design</li> <li>Case Study of Inter-city<br/>and Intra-city Expressway</li> <li>Interchange/On-,<br/>Off-Ramps Planning and<br/>Design</li> <li>O &amp; M Components</li> </ul>  | <ul> <li>Highway<br/>Planner/Engineer</li> <li>Structural Engineer</li> </ul>  | • 2 weeks |
| 4. | Traffic Demand<br>Forecast             | <ul> <li>Traffic Survey and<br/>Preparation of present OD<br/>Table</li> <li>Traffic Demand Forecast<br/>Models</li> <li>Traffic Assignment</li> <li>Various Parameters from<br/>traffic assignments</li> <li>Evaluation of Results</li> <li>Hands-on Practice of<br/>JICA-STRADA Software</li> </ul> | Transport<br>Planner/Traffic<br>Engineer   | • 4 weeks |
| 5. | EIA and<br>Resettlement                | <ul> <li>Evaluation of previous<br/>reports</li> <li>Existing EIA system and<br/>LAPRAP</li> </ul>  | <ul> <li>Environmentalist</li> <li>Highway Planner</li> <li>Sociologist</li> </ul>   | • 2 weeks |
| 6. | ROW<br>Acquisition                     | <ul><li> ROW acquisition<br/>procedure</li><li> Issues of ROW acquisition</li></ul>   | <ul> <li>Highway Engineer</li> <li>Environmentalist</li> <li>Project<br/>Implementation staff</li> </ul>   | • 2 weeks |
| 7. | Economic &<br>Financial<br>Evaluation  | <ul> <li>Basic information needed</li> <li>Basic Procedure</li> <li>Hands-on Practice</li> </ul>  | <ul><li>Economist</li><li>Financial Analyst</li></ul>  | • 3 weeks |
| 8. | Risks                                  | <ul><li>Basic Risks</li><li>Identification of Risks</li><li>Risk Management</li></ul>   | <ul><li>Highway Planner</li><li>Document Specialist</li><li>Legal Staff</li></ul>  | • 2 weeks |

| TABLI | E 11.2.4-1 | PROPOSED | PROGE | RAM FOR | PROGRAM I | I |
|-------|------------|----------|-------|---------|-----------|---|
|       |            |          |       |         |           | 1 |

|                                  | Risk Allocation  |   |           |
|----------------------------------|--|---|-----------|
| 9. Project<br>Procurement        | <ul> <li>PQ documents</li> <li>Tender documents</li> <li>Toll Concession<br/>Agreements</li> </ul> | <ul><li>Highway Engineer</li><li>Document Specialist</li></ul>  | • 3 weeks |
| 10. Project<br>Implementation    | <ul><li>Past Experiences</li><li>Key Issues</li></ul>  | <ul> <li>Highway Engineer</li> <li>Construction<br/>Engineer</li> <li>Quality Engineer</li> </ul>           | • 2 weeks |
| 11. Operation and<br>Maintenance | Current practice of concessionaires  | <ul> <li>Maintenance<br/>Engineer</li> <li>Operation Specialist</li> </ul>                                  | • 2 weeks |
| 12. Project<br>Monitoring        | Case Study   | <ul> <li>Highway Planner</li> <li>Traffic Engineer</li> <li>Economist</li> <li>Financial Analyst</li> </ul> | • 1 week  |
| Total                            |  |   | 25 weeks  |

### 11.2.5 Technical Support Program III : Preparation of Standards, Manuals and Guidelines

The following should be prepared;

### 1) <u>Tollway Design Standards</u>

There are no tollway design standards authorized by DPWH. For the consistent development of tollway network, it should be prepared and authorized by DPWH.

It should be also a part of Tender Documents as well as a concession agreement. Two kinds of standards should be prepared, i.e. one for intra-urban tollway and the other for inter-urban tollways.

#### 2) Standard Pre-qualification and Tender Documents

There are only two examples of pre-qualification and tender documents in DPWH, one is STAR (Type-3: Segment Dividing) and other is TPLEX (BOT with subsidy). As described in this report, there are other types of PPP scheme, so standard pre-qualification and tender documents should be prepared for each type of PPP scheme.

Existing two documents mentioned above do not clearly specify risk sharing between the public and the private, thus standard risk sharing should be specified for each type of PPP scheme.

#### 3) Draft Toll Concession Agreement

This becomes a part of Tender Documents. This should be prepared together with the above Standard Pre-qualification and Tender Documents. Once this standard is prepared and approved by DPWH, TRB and NEDA, contract approval period will be greatly shortened.

#### 4) Tollway Operation and Maintenance Manual

This also becomes a part of Tender Documents. Tollway O & M Manual was prepared in 1990s, however, it became obsolete and is no longer used by anybody.

To provide appropriate transport services to road users, tollway operation and maintenance must be done in accordance with established O & M standards by tollway operators and monitored by DPWH and TRB.

# 5) Infrastructure Right-of-Way Acquisition Procedural Manual

DPWH Infrastructure ROW Procedural Manual was prepared in 2003. Since then, some rules related to ROW acquisition have been amended. DPWH Infrastructure ROW Acquisition Procedural Manual should be updated and more DPWH staff should be trained to expedite ROW acquisition.

# 6) <u>Standard TOR for Business Case/Feasibility Study</u>

In cases of PPP schemes of Type-1 (pure BOT), Type-2 (BOT with subsidy), Type-3 (Segment Dividing) and Type-4 (Service Payment), soon after the completion of a feasibility study, the project is bidded to select a Project Proponent. Therefore, a feasibility study must be comprehensive. Detailed scope of works and appropriate duration of the study period should be defined. In consideration of above, standard TOR for PPP projects should be prepared.

# 11.3 ROADMAP FOR ESTABLISHMENT OF REGULAR PPP TRAINING COURSE IN DPWH

# 11.3.1 Time Frame

After the proposed technical support programs are completed, DPWH should be establish the Regular PPP Training Course which should be held annually and know-how on PPP projects should be shared with more DPWH staff. Roadmap for establishment of Regular PPP Training Course in DPWH should be as follow:

| K      | ADMAI FOR ESTADLISITMENT OF  | F KEUULAK IKAIMINU C   | UUKBE                 |
|--------|--|--|-----------------------|
| Step-1 | <ul> <li>Training of core staff who will act as<br/>Trainors in the Regular PPP Training<br/>Course.</li> <li>Preparation of comprehensive<br/>training materials to be used during<br/>Regular PPP Training Course</li> </ul> | Technical Assistance from<br>JICA or other international<br>donor agencies | 2011                  |
| Step-2 | • Establishment of Regular PPP<br>Training Course (Training Program,<br>Training Schedule, Selection of<br>Trainees, etc.)   | Implementation plan and budgeting by DPWH                                  | By Mid-2012           |
| Step-3 | Implementation of Regular PPP<br>Training Course   | Budget by DPWH   | Annually<br>from 2012 |

# ROADMAP FOR ESTABLISHMENT OF REGULAR TRAINING COURSE

### 11.3.2 Local Resource Persons as a Trainor

Candidate local resource persons/organizations as a trainor during Regular PPP Training Course will be as follows:

| Agency /                         | Candidate Resource Persons /    | Fields                                     |
|----------------------------------|---------------------------------|--|
| Organization                     | Organizations                   |  |
| DPWH                             | Director and/or Assistant       | • PPP in General                           |
|                                  | Director of PMO-BOT             | Institutional Framework                    |
|                                  |                                 | <ul> <li>Project Identification</li> </ul> |
|                                  |                                 | Risks and Risk Allocation                  |
|                                  |                                 | • Post Evaluation of Project Impacts       |
|                                  | Director and/or Assistant       | Business Case / Feasibility Study          |
|                                  | Director of PMO-FS              | Financial Analysis                         |
|                                  | Director and/or Assistant       | Legal Framework                            |
|                                  | Director of Legal Service       | Project Procurement                        |
|                                  | • Traffic Engineer of PMO-BOT   | Traffic Demand Forecast                    |
| NEDA / DOF                       | Project Evaluation Staff        | Project Identification                     |
|                                  |                                 | Financial Analysis                         |
| University of the<br>Philippines | Professors for Urban Transport  | Traffic Demand Forecast                    |
| TRB                              | TRB Staff                       | Project Procurement                        |
|                                  |                                 | Project Monitoring                         |
| Private Entities                 | • Implementation staff of MNTC, | Project Implementation                     |
|                                  | SLTC and other existing Project | • O & M                                    |
|                                  | proponents                      |  |
| Consultants                      | • Mr. Teodoro T. Encarnacion    | <ul> <li>Project Identification</li> </ul> |
|                                  | (former DPWH Undersecretary)    | Business Case / Feasibility Study          |
|                                  |                                 | Project Procurement                        |
|                                  | • Mr. Godofredo Z. Galano       | Project Procurement                        |
|                                  | (former Director, PMO-BOT)      |  |
|                                  | • Atty. Saviniano M. Perez, Jr. | Legal Framework                            |

LIST OF CANDIDATE LOCAL RESOURCE PERSONS/ORGANIZATIONS

Source: JICA Study Team

Note-1: DPWH staff should be fully trained during Step-1 period.

Note-2: MNTC staff in charge of construction and O & M, Mr. Encarnacion and Atty. Perez made presentation during the Pilot Training.

# CHAPTER 12

# RECOMMENDATIONS

# CHAPTER 12 RECOMMENDATIONS

#### **12.1** Realization of Measures for Promotion of PPP Projects

The roadmap for promotion of PPP projects was presented in Chapter 10 of this report, which covers: 1) Legal Framework, 2) Institutional Framework, 3) Capacity Development Framework, 4) PPP Fund Creation and 5) Development of Various Standards and Manuals.

The current administration is active for promotion of PPP projects and eager to implement PPP projects as early as possible. Therefore, it is important to realize items shown in the roadmap. It is sincerely hoped that the recommended measures shown in the roadmap will be steadily implemented and realized.

#### 12.2 Implementation of Recommended PPP Projects for Possible ODA Funding

Three (3) projects, namely 1) CALA Expressway, 2) NAIA Expressway Phase II and 3) Central Luzon Expressway Phase I, were selected and recommended for possible ODA funding. All three (3) projects need a preparatory study for funding, or a detailed feasibility study. DPWH should start discussions with JICA to confirm which project(s) is (are) intended by JICA for possible ODA funding at the earliest possible time. All three (3) projects are important for economic development of the country, therefore, these should be implemented as early as possible.

#### **12.3 Formulation of Various Policies**

On PPP Project Implementation, policies related to Risk Allocation, Delivery of ROW, and Government Financial Support for Viability Gap Funding of Transport Projects should be established.

#### 12.4 Tapping Private Sector's Resources

Private sector investments will continue to be tapped in the implementation of priority projects. To complement these, the Government's technical skills in Project/Program Planning and Development, particularly in structuring PPP projects, which includes Financial Modeling and Risk Analysis will be enhanced and strengthened through Technical Assistance.